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DOCKET NO. 14631-U

<u>ORDER</u>

IN RE: Review of Cost Studies, Methodologies, Pricing Policies, and Cost Based
Rates   for   Interconnection   and   Unbundling   of   BellSouth
Telecommunications, Inc.'s Services

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I. Introduction

The Georgia Public Service Commission ("Commission") initiated this docket to examine the cost of each unbundled network element ("UNE") and interconnection service offered by BellSouth Telecommunications, Inc. ("BellSouth"), including those for which rates were established in Docket Nos. 7061-U and 10692-U.

A. Background

On December 16, 1997, in Docket No. 7061-U, the Commission established cost-based rates applicable to BellSouth's interconnection and unbundling including the unbundled network elements, nonrecurring charges, collocation, and access to poles, ducts, conduits and rights-of-way. On February 1, 2000, the Commission issued its Order in Docket No. 10692-U establishing long-term pricing policies for combinations of UNEs and establishing recurring and nonrecurring rates for particular combinations of UNEs.

The February 1, 2000 Order directed BellSouth to file a revised Statement of Generally Available Terms and Conditions ("SGAT") reflecting and implementing the rates and policies established by the Order and reflecting the unbundling requirements of the FCC's Third Report and Order. The Commission also ordered BellSouth to file additional cost studies for those loop/port and loop/transport combinations that were not in place at the time of the Commission Order in Docket No. 10692-U.

In Docket No. 11853-U, AT&T Communications of the Southern States, Inc. ("AT&T") petitioned the Commission to arbitrate the unresolved issues for its interconnection agreement with BellSouth. Issue 7 in AT&T's Petition addressed the prices that BellSouth should be permitted to charge for specific element combinations. The combinations, DS3 digital loop with DS3 dedicated interoffice transport, 4 wire DS1 local channel with DS1 interoffice transport and DS3 local channel with DS3 interoffice transport, had not been addressed by the Commission in its February 1, 2000 Order in Docket No. 10692-U. The Commission determined that rather than conclude the issue in an individual arbitration proceeding, it would initiate a generic proceeding to establish permanent rates for the combined UNEs that have arisen since Docket No. 10692-U. (Docket No. 11853-U, Order, p. 4).

B. Statement of Proceedings

On August 27, 2003, the Commission issued its Procedural and Scheduling Order ("Scheduling Order") in this proceeding. The Commission stated that it would "examine the cost of each UNE and interconnection service offered by BellSouth, including those for which rates were established in Docket Nos. 7061-U and 10692-U." (Scheduling Order, p. 1). The Scheduling Order provided that any party submitting a cost study was required to provide comprehensive and complete work papers that fully disclose and documented the process underlying the development of each of its economic costs, including the documentation of all judgments and methods used to establish every specific assumption employed in each cost study. The Scheduling Order required that the work papers clearly and logically represent all data used in developing each cost estimate, and must be so comprehensive as to allow others initially

unfamiliar with the studies to replicate the methodology and calculate equivalent or alternative results using equivalent or alternative assumptions. The Scheduling Order required that the work papers be organized in such a manner as to clearly identify and document all source data and assumptions, including investment, expense, and demand data assumptions.

The Scheduling Order provided for the filing of Direct Testimony and cost studies on October 1, 2001. BellSouth filed with the Commission its Direct Testimony and cost study on this date. The Commission granted the October 16, 2001 Motion for Extension of Filing Deadlines and Continuance of Hearing and issued an Amended Procedural and Scheduling Order ("Amended Scheduling Order") on November 7, 2001. Pursuant to the Scheduling Order, a workshop was conducted on October 30, 2001. At the workshop, BellSouth and other interested parties presented an overview of the Cost Models relied upon to generate forward-looking costs. As a result of the workshop, the Commission amended the Scheduling Order a second time in order to allow for the filing by BellSouth of a description of the changes to its cost study. On December 3, 2001, in accordance with the Second Amended Procedural and Scheduling Order, BellSouth filed with the Commission a description of all of the changes to its October 1, 2001 cost study.

On January 2, 2003, the Commission issued its Third Amended Procedural and Scheduling Order ("Third Amended Scheduling Order"). This order required BellSouth to re-file a recurring and non-recurring cost study that included Georgia-specific values to reflect a forward-looking network, forward-looking costs, and forward-looking labor and task times. (Third Amended Scheduling Order, p. 1). The Commission specified that the cost study should incorporate the cost of money and the depreciation rates approved by this Commission in Docket No. 7061-U. Id. The Commission further ordered that the cost study should include the bottoms up approach that BellSouth utilized in the cost study it filed with the Commission on December 10, 2001. Id.

The Commission held hearings in this proceeding on May 7 and May 8, 2002. Testimony was filed on behalf of BellSouth, Access Integrated Network, Inc., AT&T, Birch Telecom of the South, Inc., Covad Communications Company ("Covad"), ITC^DeltaCom, Inc., NewSouth Communications, Inc. ("NewSouth"), TalkAmerica, Inc., United States Department of Defense ("DOD"), WorldCom, Inc. ("WorldCom") and Z-Tel Communications, Inc. At the conclusion of the hearings, the Commission received closing briefs from interested parties. In addition to receiving briefs from most of the parties sponsoring witnesses, the Commission received briefs from AccuTel of Texas, Inc. d/b/a 1-800-4-A-PHONE ("AccuTel") and Allegiance Telecom of Georgia, Inc ("Allegiance").

C. Jurisdiction

Under the Federal Telecommunications Act of 1996 (Federal Act), State Commissions are authorized to set rates and pricing policies for interconnection and access to unbundled elements. In addition to its jurisdiction of this matter pursuant to Sections 251 and 252 of the Federal Act, the Commission also has general authority and jurisdiction over the subject matter of this proceeding, conferred upon the Commission by Georgia's Telecommunications and Competition Development Act of 1995 (Georgia Act), O.C.G.A. §§46-5-160 et seq., and generally O.C.G.A. §§ 46-1-1 et seq., 46-2-20, 46-2-21, and 46-2-23.

D. Summary of Findings and Conclusions

Based on all of the evidence of record and arguments by counsel, which have been reviewed and examined in detail, the following is a summary of the Commission's determinations on the issues in this docket. Specifically, the Commission adopts all of the Commission Staff's recommended modifications to the cost study BellSouth filed on January 18, 2002. The Staff's recommendation in this docket was presented to the Commission at the Telecommunications Committee meeting on February 13, 2003. Subsequent sections of this Order include detailed explanations of the specific findings summarized below.

1. With proper inputs, BellSouth's cost models may be used to develop UNE rates that comply with the Federal Act and the FCC's pricing rules. The engineered, furnished, and installed cost of outside plant should be calculated by utilizing the "bottoms-up" version of the BellSouth Telecommunications Loop Model ("BSTLM") that BellSouth filed with this Commission on January 18, 2002. However, the following adjustments should be made to the BSTLM cost study:

   a) The BSTLM should include a reasonable projection for growth in demand for services.

   b) Digital Loop Carrier ("DLC") equipment costs for digital signal-1 ("DS-1") services should be modified so that these costs are allocated based on shelf space rather than digital signal 0 ("DS0") equivalents. This modification results in four (4) times the investment for a Plain Old Telephone System ("POTS") line being allocated to DS-1 services.

   c) Copper and fiber cable placing inputs should be modified to reflect 0.2 hours per 100 feet for aerial cable, 0 hours per 100 feet for buried cable and 0.65 hours per 100 feet for underground cable.

   d) Copper cable splicing inputs should be modified to reflect 0.57 hours for aerial splicing set up and closure and 0.33 hours per hundred pairs joined, 0.65 hours for buried splicing set up and closure and 0.33 hours per hundred pairs joined, 1.4 hours for underground splicing set up and closure and 0.33 hours per hundred pairs joined.

   e) Fiber cable splicing inputs should be modified to reflect 0.58 hours for aerial splicing set up and closure and 0.25 hours per fiber joined, 0.75 hours for buried splicing set up and closure and 0.25 hours per fiber joined, and 1.25 hours for underground splicing set up and closure and 0.25 hours per fiber joined.

   f) The structure inputs for the BSTLM should be modified as follows:

      (1) Aerial structure inputs should be modified to use an average span length between poles of 164 feet rather than 149 feet and reduce the contract labor input to $207.98 per pole.

(2) Underground structure inputs should be modified based on limiting underground boring for cable placement to an overall average of 0.75 percent. This modification results in 0.16 percent boring for rural areas, 0.35 percent boring in suburban areas and 0.75 percent in urban areas.

(3) Underground contract labor costs for manholes should be reduced to $2,175.22 for manholes using 1-3 cables and to $8,077.35 for manholes requiring 5 cables.

g) Structure sharing inputs should be modified to reflect that BellSouth will bear 80 percent of the structure costs for underground structure and 70 percent of the costs for buried structure.

h) Facility sharing inputs should be modified to reflect that a single route with both distribution and feeder cable should share the same structure facilities 30 percent of the time.

i) The engineering factor input should be modified to reflect a 30.31 percent engineering to labor ratio, which corresponds to an engineering/technician span of control of 1 engineer for every 3.3 technicians. This modification results in a 10.2 percent reduction to the engineering costs used in the BSTLM.

2. The following adjustments should be made to BellSouth's collocation cost study:

a) The hours for the Account Team Collocation Coordinator ("ATCC") should be reduced to 6.5 hours for physical collocation subsequent applications.

b) The engineering hours should be reduced to 3.0 for Common Systems Capacity Management ("CSCM") and to 4.0 for Corporate Real Estate and Support ("CRES") for physical collocation space availability reports per central office.

c) The projected utilization for the physical collocation 2-wire point of termination ("POT") Bay should be modified to 85 percent;

d) The average cable length should be modified to 240 feet per copper entrance cable and 200 feet per fiber entrance cable for physical collocation, and to 210 feet for fiber and copper entrance cable for virtual collocation.

e) The physical and virtual collocation DC power investment should be modified to $165.80 per fused amp.

f) BellSouth should be required to offer any Competitive Local Exchange Carrier ("CLEC") the option of being billed for collocation power based

on load (amps used) amps rather than fused amps. BellSouth shall file a cost study for the costs to install and read a meter within thirty (30) days of the date of this Order.

g) $247.63 should be used for the average investment, $0.70 should be used for the average monthly cost per KWH, based on 52.070 volts, 730 hours should be used for the average number of hours per month, 85 percent for the rectifier efficiency, and 100 percent should be used for the protection device to allow for rates for DC power to be based on a per load amp for physical and virtual collocation.

h) The physical collocation cable distance for 2 and 4 wire cross-connect (assembly point collocation option) should be modified to 240 feet, 180 feet for all fiber cross-connects and 180 feet for all cross connects for virtual collocation.

3. The cost of capital input should be set at 9.27 percent.

4. The FCC-prescribed depreciation lives for BellSouth's operations in Georgia should be adopted for use in the cost study.

5. UNE rates for all loops below the DS-3 level, sub loops and UNE loop combinations should be geographically deaveraged based on the stipulation entered into between AccuTel, AT&T, BellSouth, Covad, and MCI WorldCom filed in this docket on June 17, 2002.

6. The switching costs proposed by BellSouth should be modified to reflect that there is no additional, separate charge for switch features.

7. BellSouth's Daily Usage File ("DUF") rates should be modified to reflect the following adjustments:

a) A decrease to the incremental monthly CLEC OCNs purchasing Access Daily Usage File ("ADUF") and Operational Daily Usage File ("ODUF") messages;

b) An increase to the incremental monthly ADUF, ODUF and Enhanced Daily Usage File ("EODUF") for the period 2001-2003;

c) An increase to the total annual ADUF, ODUF Annual messages processed for the period 2002-2004;

d) The elimination of the BBI Support message volume sensitive labor hours non-recurring and developmental labor hours for EODUF; and

e) The elimination of the ODUF system development costs for non-bill print feet per developmental hours and the ODUF costs for magnetic tape feed.

8. The non-recurring rates BellSouth filed in this docket on January 18, 2002 should be reduced by fifty (50) percent.

9. The rates ordered by the Commission in Docket No. 11900-U in its June 11, 2001 Order should remain in effect for twelve (12) additional months from the date of this Order. At that time, the Commission will establish a generic proceeding to review those UNE rates.

10. The operational support system ("OSS") rates approved by this Commission on October 21, 1997 in Docket No. 7061-U shall remain in effect.

11. The cost-based rates determined by this Commission in this Order are set forth in Appendix A hereto and are established as the rates for BellSouth's unbundled network elements and collocation. BellSouth shall submit such compliance filings as are necessary to reflect and implement these rates.

II. Findings and Conclusions

The parties proposed scores of rates for network elements. In determining which rates were appropriate, the Commission examined all of the proposals. In this Order, the Commission sets forth it's reasoning for why the adopted rates are appropriate. Implicit in this explanation is why the proposals that the Commission did not adopt were not deemed appropriate. It would be redundant to detail separately the basis for rejecting each and every proposal that was not accepted.

Incumbent local exchange carriers ("ILECs") must offer elements to requesting carriers at just and reasonable rates. 47 C.F.R. 51.503(a). The FCC's Rules, in setting out what must be examined, provide some definition to the terms just and reasonable. First, an incumbent local exchange carrier's rates for each element must comply with the FCC's rate structure rules set forth in 51.507 and 51.509. FCC Rule 51.507 addresses the general rate structure standard and requires that rates be structured in a manner that is consistent with how the costs of providing the elements were incurred. 47 C.F.R. 51.507(a). The FCC Rule provides state commissions with discretion in structuring the rates. For instance, while generally recurring costs must be recovered through recurring charges, state commissions may order otherwise if it finds that the ILEC has demonstrated that the costs are de minimis. 47 C.F.R. 51.507(d). In addition, state commissions may find that it is reasonable to require an ILEC to recover non-recurring costs through recurring charges. 47 C.F.R. 507(e). FCC Rule 51.509 sets out the rate structure standards for specific elements including local loops, local switching, dedicated transmission links, shared transmission facilities between tandem switches and end offices, tandem switching, and signaling and call-related database services.

The Commission must establish the rates pursuant to either the forward-looking economic and cost-based pricing methodology set forth in FCC Rules 51.505 and 51.511 or with the proxy ceilings and ranges set forth in FCC Rule 51.513. 47 C.F.R. 503(a). The forward-looking economic cost of an element is equal to the sum of the total element long-run incremental cost

("TELRIC") of the element and the reasonable allocation of forward-looking common costs. 47 C.F.R. 51.505(a). To arrive at the forward-looking economic cost of an element per unit, the Commission must divide the forward-looking economic cost of an element by "a reasonable projection of the sum of the total number of units of the element that the incumbent LEC is likely to provide to requesting telecommunications carriers and the total number of units of the element that the incumbent LEC is likely to use in offering its own services, during a reasonable measuring period." 47 C.F.R. 511(a). In the event that a state commission determines that the cost information it has available is not adequate to determine a TELRIC- compliant rate for a particular element, than it may establish a rate consistent with the proxies set out in the FCC Rules. 47 C.F.R. 51.513(a).

In applying the above-stated rules, the Commission must examine whether the rates proposed by the subject matter experts are reasonable projections of the costs that BellSouth will incur going forward. Stated another way, the Commission must determine whether a proposed adjustment reasonably accounts for projected efficiencies such that the rate neither overstates nor understates the cost of provisioning the particular element.

A. BSTLM

The validity of the BSTLM is central to the determinations of cost that are reached throughout this order. At the outset, the Commission will address the threshold issues raised by parties to this proceeding with the BSTLM.

Positions of the Parties

BellSouth was the only party to file cost studies in this proceeding. BellSouth took the position that its cost models produce rates that comply with both the Federal Act of 1996 and the FCC's pricing rules. (BellSouth June 18, 2002 Post-Hearing Brief, p. 8). In particular, BellSouth argued that its cost models develop UNE prices that are based on an efficient network using currently available forward-looking technology. Id. BellSouth contended that although parties may disagree regarding the appropriate inputs for use in the cost models, there is no disagreement that BellSouth's cost models should be used to establish UNE rates in this proceeding. Id. at 10.

BellSouth argued that the BSTLM is a "next generation loop model" because it is based on more actual data than any other model and recognizes all loop-related network elements and services as well as capturing their resulting costs. (Tr. 194). BellSouth sponsored testimony to explain how its model functioned. The BSTLM models a network by determining where customers are located and then laying cable to these customers along the roads in the wire centers.[1] The model uses a Minimum Spanning Road Tree ("MSRT") algorithm to determine the shortest route to connect the customer to the central office along roads. The model determines how much equipment such as digital loop carrier and feeder distribution interfaces ("FDI") is needed for the

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[1] The customer location data also determines the type of service the customer is currently receiving.

network that the MSRT produced. Once the network is laid out, the model determines the cable sizes, type of cable needed and selection of a DLC. Next, the model calculates the cost for each component by type and location.

The BSTLM can be populated with either a "tops down" or "bottoms-up" investment. In a "tops down" scenario, the model outputs material investments only. Loading factors are then applied (in the BellSouth Cost Calculator) to the material investment calculated by the BSTLM to determine the fully installed costs. In a "bottoms-up" scenario, the model explicitly calculates the labor associated with installing each discrete piece of equipment.

BellSouth advocated using the BSTLM to develop costs for unbundled loop and loop combinations using five different network scenarios. The first scenario, "Combo-GA 2001," developed investments associated with UNE loop combinations. The term "UNE loop combinations" describes when a loop is bundled with a switching element using integrated digital loop carrier equipment ("IDLC"). The second scenario, "Combo-GA-2001-ISDN," is the same as the Combo-GA-2001, except it is used to develop costs when an Integrated Services Digital Network ("ISDN") loop is used in a combination. The third scenario, "BST 2001-Ga," develops investments for SL1 loops using a mix of fiber and copper facilities assuming use of universal digital loop carrier equipment ("UDLC"). The fourth scenario, "BST2001-Ga-ISDN" is similar to the "Combo-GA-2001-ISDN" but uses UDLC. The last scenario, "Copper Only-Ga-2001," develops investments for those loops served on copper only. (BellSouth June 18, 2002 Post-Hearing Brief pp.10-11). BellSouth contends that the use of multiple scenarios in the BSTLM has been adopted by every state in its region that has considered the issue and has been endorsed by the FCC in approving BellSouth's 271 applications. Id. at 11. BellSouth contends further that using multiple scenarios allows for recovery of the cost differences that result from the different manner in which BellSouth provisions different loops. (Tr. at 607).

AT&T/WorldCom sponsored the testimony of John C. Donovan and Brian F. Pitkin. This panel testified that the BSTLM should only design a single forward-looking network, instead of multiple scenarios of forward-looking networks that seek to recover BellSouth's actual costs. (Tr. 1174). AT&T/WorldCom advocate the use of the Combo-GA-2001 scenario to establish UNE rates in this proceeding. Mr. Donovan and Mr. Pitkin further testified that use of current technology allows for the purchase of stand-alone loops and does not produce any difference in costs. (Tr. 1176). Finally, the panel testified that using UDLC is wasteful because a loop must be converted back to copper before it is routed to the Main Distribution Frame (MDF). (Tr. 1176).

Allegiance argues that BellSouth has the burden of proof to establish that its cost models are in compliance with the FCC's TELRIC pricing rules. (Allegiance Post-Hearing Brief, p. 7). Allegiance argues further that BellSouth cannot meet that burden because its models are based on its existing network and therefore do not result in a forward-looking network design. Id. at 8. Allegiance also contends that since testimony reflected that BellSouth's cost models could not be adjusted or inspected, the cost models do not comply with the Commission's Procedural and Scheduling Order in this docket. Id. The Procedural and Scheduling Order required that parties submitting cost models to provide work papers that allow other parties to "replicate the methodology and calculate equivalent or alternative results using equivalent or alternative assumptions." (Scheduling Order, p. 3). Further, Allegiance argued that the FCC approval of

BellSouth's 271 application was based on a high-level review focused only on whether obvious violations of TELRIC principles or state errors occurred. (Allegiance Post-Hearing Brief, p. 9). As a consequence, Allegiance asserts that the 271 approval should have minimal impact on the Commission's review in this proceeding of BellSouth's cost methodology. Id.

Allegiance cites both legal and policy reasons in support of its position that the Commission should reject use of the multiple scenario approach to set UNE prices. First, Allegiance argues that a multiple scenario approach violates FCC Rule 51.511(a)'s requirement that UNE costs to be based on a projection of "the sum of the total number of units of the element that an incumbent LEC is likely to provide to requesting telecommunications carriers." Id. at 16. Allegiance also charges that BellSouth's multiple scenario approach violates TELRIC because it assumes use of outdated inefficient technology, and results in stand-alone UNE loops being priced much higher than UNE loops purchased in combination with switching. Id. at 17-18. In particular, Allegiance states that in some of BellSouth's scenarios it assumes the use of UDLC, which is an older more expensive technology than IDLC. Id. at 20. As to use of in-plant factors versus the "bottoms-up" cost methodology, Allegiance argues that use of in-plant factors results in UNE prices that are unrelated to cost, rely on embedded costs and distort deaveraged UNE rates. Id. at 25-26. Allegiance also agrees with AT&T/WorldCom's argument that the BSTLM overstates DLC investment by using a melded value rather than selecting a specific vendor based on the most efficient equipment solution. Id. at 31.

Covad argues that BellSouth's use of multiple scenarios violates the FCC's TELRIC rules because BellSouth did not account for the total demand for narrowband and broadband services and does not use one forward-looking network configuration to meet this demand. (Covad Post-Hearing Brief, p. 9). Covad contends that use of either the "Copper Only-Ga-2001" or the "BST2001-Ga-ISDN" artificially inflates the cost for certain DSL-capable loops. Id. at 8. Covad asserts that BellSouth based its costs on the use of an imaginary network that it is not building today and does not plan to build in the future. Id. at 10. Covad advocates for use of the "Combo-GA 2001" scenario to set UNE rates in this proceeding because it includes use of the forward-looking IDLC architecture. Id. at 9.

Discussion

Various parties argued about the validity of the models BellSouth filed in this proceeding, but no other party filed cost models for this Commission to evaluate and consider in setting UNE rates. The issue, as it relates to cost methodology, is whether linear loading factors or a "bottoms-up" version of the BSTLM should be used to establish rates for unbundled loop and loop combinations. Even though subject matter expert opinion is needed to determine some of the inputs for the "bottoms-up" approach, this method of calculating loop investments at a very discrete level is preferable to assuming installation costs are directly linear to material costs.

The Commission is not persuaded by BellSouth's argument that other Commissions have used linear loading factors to set rates, or by the FCC's approval of BellSouth's 271 application for Georgia and Louisiana based on rates set using linear loading factors. As a preliminary matter, the Commission is not bound by the decisions of other state commissions. Also, the FCC does not conduct a de novo review of UNE rates. Instead, the FCC relies on the state commission to

determine UNE rates, and the FCC's analysis is limited to whether the UNE rates fall "within a range of what a reasonable application of TELRIC would produce."[2]

Having delineated the scope of the FCC's review, the Commission turns to the discussion of whether linear loading factors or a "bottoms-up" version should be used. At the time of previous cost Georgia Commission cost hearings, BellSouth had not yet developed the BSTLM, and the only option was to use linear loading factors to set UNE rates. However, BellSouth has now improved upon its previous loop model by including a capability that allows the user to determine the total investment for each piece of equipment based on the specific equipment, its size and material and installation costs. Linear loading factors, on the other hand, distort the investments for equipment as the size of the equipment increases. The FCC has specifically rejected use of embedded costs – accounting data – to determine TELRIC based UNE rates. 47 C.F.R. §51.505(d)(1). In stating that embedded costs shall not be included in the determination of TELRIC based UNE rates, the FCC defined embedded costs as "the costs that the incumbent LEC incurred in the past and that are recorded in the incumbent LEC's books of accounts." Id. Lastly, use of linear loading factors, as some CLECs in this proceeding have argued, results in distorted deaveraged UNE rates. This distortion results from the loading factors overstating the costs for equipment in higher density areas and developing "average costs." The Commission concludes that UNE rates in this proceeding for unbundled loops and loop combinations shall be determined using the "bottoms-up" capability of the BSTLM.

Another important capability of the BSTLM is the ability to use multiple scenarios to set UNE rates. Although most of the CLECs objected to use of multiple scenarios based on 47 C.F.R. §51.511(a), this multiple scenario methodology accounts for the "total number of units of the element" by incorporating the same overall line count in each scenario. Therefore, the Commission finds that BellSouth's use of multiple scenarios in its BSTLM is consistent with FCC rules. The use of one scenario as advocated by various parties is not appropriate in all instances. Although AT&T/WorldCom indicate that such a loop could be "groomed" without any additional costs, the evidence reflects that that the use of one scenario would result in an under-recovery of BellSouth's costs. (Tr. 606). The Federal Act provides that just and reasonable rates for network elements shall be based on the cost of providing the network element. 47 U.S.C. § 252(d)(1)(A)(i). As the single scenario would not allow for recovery of the cost of providing the network elements, the Commission agrees with BellSouth that UNE loop and loop combinations rates shall be set using multiple scenarios of the BSTLM.

1.   Growth

Positions of the Parties

In order to determine the costs for individual UNE loop and loop combinations, it is necessary to account for the demand for the UNEs. This accounting requires a determination of the number of customers that will be served using UNEs. In the BSTLM, BellSouth used actual customer line counts from the year 2000. BellSouth contends that use of year 2000 customer data to

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[2] GA/LA II 271, ¶23.

populate the BSTLM is appropriate because other models such as HAI and the FCC's Synthesis Model use a snapshot of existing customer locations. (Tr. 613-14). BellSouth argues that the Synthesis Model overbuilds the POTS network and understates the investment per line and universal service cost. (Tr. 209). According to BellSouth, any attempt to project future customer demand into the BSTLM would be arbitrary. (Tr. 614). BellSouth also argues that an increase in customer demand does not result in a directly proportional decrease in costs. (BellSouth Post-Hearing Brief, p. 34). The use of fill factors does not necessarily mean that spare capacity for growth exists. Growth could occur at new locations necessitating additional costs to serve this additional demand. Even though the study period for this proceeding was from 2002-2004, BellSouth states that the BSTLM calculated only the amount of plant needed to support the year 2000 customer demand. Id. BellSouth also asserts that use of forecasted data would require additional adjustments in the BSTLM to account for what specific services would be required at each customer location, the location of new roads and a host of other complicated adjustments. Id. Finally, BellSouth stated that the number of switched access lines decreased from year 2000 to year 2001. Id. at 33.

AT&T/WorldCom argue that unless the Commission accounts for growth related to additional customers during the time period that the UNE rates from this proceeding will be in effect (2002-2004), BellSouth will over recover its costs. (AT&T/WorldCom Post-Hearing Brief, p. 20). According to AT&T/WorldCom, the failure by this Commission to account for growth when the previous UNE rates were adopted in 1997 resulted in BellSouth having the opportunity to over recover its costs by over 22 percent during the period of 1998 through 2000. (Tr. 1154-55). The use of year 2000 customer data understates loop counts and consequently overstates the costs per loop according to AT&T/WorldCom. (Tr. 1152). In addition, AT&T/WorldCom argue that BellSouth's failure to use forecasts in this instance when it would result in reduced UNE costs, while using forecasts in other portions of the cost study (i.e., DUF), is without justification. (Tr. 1154). In sum, AT&T/WorldCom contend that if the numerator (investment which has fill factors to accommodate growth) does not match the denominator (line count that ignores growth), BellSouth will over recover its costs during the period of time that the UNE rates established in this proceeding are in effect.

Because AT&T/WorldCom did not receive the historical information necessary to project demand on a service specific basis in a format that could be used to modify the BSTLM, AT&T/WorldCom recommended that the Commission adjust the UNE investment. (AT&T/WorldCom Post-Hearing Brief, p. 24).

Allegiance also argued that the BSTLM fails to account for line growth and that because of this failure, BellSouth will over recover its costs. Allegiance contends that while the parties may disagree as to what the adjustment to account for growth should be, the investments produced by the BSTLM must factor in the economies of scale cost savings that come with line growth.

Discussion

The FCC's rules require that UNE rates be based on a projection of demand.

§51.511 Forward-looking economic cost per unit.

(a) The forward-looking economic cost per unit of an element equals the forward-looking economic cost of the element, as defined in §51.505, divided by a reasonable projection of the sum of the total number of units of the element that the incumbent LEC is likely to provide to requesting telecommunications carriers and the total number of units of the element that the incumbent LEC is likely to use in offering its own services, during a reasonable measuring period.

No party to the proceeding disputed that BellSouth has experienced line growth since the majority of the UNE rates were last established in 1997 in Docket No. 7061-U. Although there is a disagreement regarding BellSouth's year 2001 line count, the issue is whether growth should be incorporated into the rates set by the Commission in this proceeding. Stated another way, the issue is whether the above-cited FCC Rule can be complied with if the Commission does not account for growth. The Staff determined that it could not. The Staff concluded that BellSouth's proposed costs failed to satisfy FCC Rule 51.511(a) on forward-looking economic costs per unit. The Staff recommended an adjustment for growth, which is detailed herein, based on a modified version of the growth adjustment proposed by AT&T/WorldCom.

The Commission finds that using data that is now more than 2 ½ years old will produce rates that will allow BellSouth to over-recover its costs. We find the arguments advanced by AT&T/WorldCom persuasive in this regard. Even assuming that all of the growth does not occur at the same customer location, that is that new locations are added to the network or locations are added outside the network, the Commission finds that the fill factors BellSouth uses include sufficient spare capacity to account for additional customer demand. Finally, the Commission rejects BellSouth's arguments that only growth for POTS lines should be considered. The Commission acknowledges that all of BellSouth's demand, including demand for high-capacity services, share the same network infrastructure, and it is necessary to evaluate the total network growth in developing forward-looking UNE costs.

The Commission finds that Staff made the following appropriate growth adjustment as shown in the table below:

Figure 5
BellSouth's Line Count Growth

Year	Switched Lines	Special Line DS-0s
Historic Line Growth		
1995	3,455,619	461,865
1996	3,687,014	656,714
1997	3,919,845	692,129
1998	4,139,081	1,289,917
1999	4,289,588	2,149,669
2000	4,264,151	3,457,195
2001	4,312,000	4,272,618
Average Annual Growth	**3.76%**	**44.89%**

Projected Demand

2002	4,474,085	6,190,474
2003	4,642,263	8,969,201
2004	4,816,762	12,995,218
Average Lines (2003-2004)	**4,729,512**	**10,982,209**
Required Investment Adjustment	**-8.83%**	**-61.10%**

The historic annual line growth for 1995 through 2001 was determined for switched and special access lines.[3] Staff determined that the average annual growth was 3.76 percent for switched access lines and 44.89 percent for special access lines. Staff then forecasted the switched and special access lines for 2002, 2003 and 2004, and calculated average lines in service for 2003-2004. Staff then determined the switched and special access line growth for BellSouth's line counts as the average of 2003 and 2004 divided by the 2001 line counts. This resulted in a 9.7 percent growth of switched access lines and a 157.0 percent growth of special access lines. The 9.7 percent switched access line growth was multiplied by the switched service counts for year 2000 that were incorporated into the BSTLM on a wire center by wire center basis. The 157.0 percent special access line growth figure was multiplied by the year 2000 special access service counts. This product was incorporated into the BSTLM on a wire center by wire center basis. From this process, a wire center specific growth figure was developed. The total growth, on average, calculated for this period is 17.54 percent resulting in a 14.92 percent average reduction for all UNE investment, or a -8.83 percent reduction in switched access line investment and a - 61.10 percent reduction in special access line investment. The Commission finds that the methodology adopted by Staff to incorporate line growth into the UNE rates established in this proceeding is reasonable.

2. Investment Allocation

Positions of the Parties

The BSTLM also requires inputs that determine how the shared investments should be allocated to the individual services using the shared facilities.[4] The model allows BellSouth to determine the particular service that a particular customer at a particular location requires. The model then determines the equipment needed to provide the service. Some of the services require unique equipment: some of the services use shared equipment. This shared equipment investment must be allocated to the individual services that use the equipment.

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[3] The 2001 switched access line data was based upon BellSouth's reported ARMIS data and figures BellSouth reported as part of the 271 proceeding.

[4] For example, both POTS and DS-1 services share the same poles. It is therefore necessary to determine what portion of the pole investment should be recovered from POTS services and what portion should be recovered from DS-1 services.

BellSouth indicates that costs should be allocated in a manner that best reflects cost causation and be based on a "competitively neutral and fair approach that results in unbiased results." (Tr. 132). According to BellSouth, costs for DLC hardwired and common equipment, and the fiber associated with connecting the DLC terminals should be allocated based on DS0 equivalents. (Tr. 550). BellSouth indicates that this is the way the Florida and Louisiana Commissions considered the issue and ruled (Tr. 136-37).

AT&T/WorldCom recommend that the Commission adopt a position that is consistent with cost causation. (Tr. 1186). Under their proposed methodology, a DS-1 service would be assigned twice the DLC common costs as a POTS line. In contrast, BellSouth's approach would substantially increase the costs for advanced services. Of course, BellSouth also maintains that its methodology is based on costs. (Tr. 136). However, AT&T/WorldCom criticizes BellSouth's use of DS0s in its cost apportionment. AT&T/WorldCom assert BellSouth is incorrect in its position that equipment is sized based exclusively on DS0 equivalents. The witness panel of Mr. Pitkin and Mr. Donovan explain that Next Generation Digital Loop Carrier ("NGDLC") equipment consists of channel bank assemblies that are empty card slots.

> Each card slot can house either a POTS card or a DS-1 card . . . Space is directly
> proportional to the number of channel bank slots in the equipment, which in turn
> is based on the number of services carried by the individual plug-in card.

(Tr. 1185).

The panel concludes that cost causation requires that DLC equipment costs should be allocated based on the services provided by each channel unit card. (Tr. 1185).

Discussion

The Commission finds that BellSouth's investment allocation approach would not result in costs being based on a "competitively neutral and fair" approach. Instead, high capacity services would bear 24 times the cost of a 2-wire analog loop. By shifting more of the shared equipment costs to advanced services, CLECs would be forced to pay substantially higher UNE rates for those advanced services. Capacity of Digital Loop Carrier (DLC) shared equipment is exhausted not based on the capacity of the multiplexing equipment housed in the DLC, but on the number of cards the equipment can hold. Consequently, costs should be allocated based on the physical facilities used to provide the service. The Staff recommended that the Commission adopt AT&T/WorldCom's proposal to allocate four (4) times the shared equipment investment to DS-1 services compared to the investment allocated to POTS services. The Commission adopts the Staff recommendation.

B.   Inputs

The "bottoms-up" approach to the BSTLM allows the user to adjust the model inputs to design a least-cost, most efficient network to determine the TELRIC UNE rates for loops in BellSouth's network. Only AT&T/WorldCom advocated adjustments to the inputs that were filed by

BellSouth with the BSTLM on January 18, 2001. Each adjustment and the Commission decision regarding the requested adjustment are fully discussed below.

1. Loop Lengths

Positions of the Parties

Even though it does not advocate adoption of the "bottoms-up" approach, BellSouth addresses the criticisms raised by the AT&T/WorldCom to the inputs BellSouth used in the cost study filing on January 18, 2001. BellSouth states that the engineering guidelines it used in the BSTLM cost study are based on Carrier Serving Area ("CSA") guidelines. (Tr. 618). The use of these guidelines results in placing fiber instead of copper anytime the distance that the cable must cover is over 13,000 feet, a DLC length hard length limit of 18,000 feet and using 24 gauge cable instead of 26 gauge cable at any distance greater than 12,000 feet in an allocation area or greater than 9,000 feet in a carrier serving area. (Tr. 618).

AT&T/WorldCom propose adjustments to the loop lengths BellSouth used. AT&T/WorldCom argue that the objective in determining loop lengths should be to design the least-cost forward-looking network within permissible engineering guidelines. (AT&T/WorldCom Post-Hearing Brief, p. 50). AT&T/WorldCom asserted that three parameters set the BSTLM did not meet this objective. These parameters are hard copper length limits; 24-26 gauge crossover lengths; and extended range line card limits. Id. AT&T/WorldCom argue that to meet the objective of a least-cost forward-looking network the inputs should be as follows: the Copper Length Hard Limit be set at 14,799 feet, the DLC Length Hard Limit be set at 16,799 feet, the Allocation Area design for the crossover of 26 gauge copper to 24 gauge copper be set at 14,800 feet, the Carrier Serving Area 26 to 24 gauge copper crossover be set at 16,800 feet, and the Extended Range Cutover be set at 13,000 feet. Id.

Discussion

The Commission adopts the Staff recommendation to reject each of the modifications to BellSouth's loop length inputs proposed by AT&T/WorldCom. The Commission's decision is based on a finding that BellSouth's inputs comply with CSA guidelines which require the selection of the proper gauge of cable and proper use of extended range line cards when designing a network.

2. Copper and Fiber Cable Placing

Positions of the Parties

Cable placing involves the time it takes to set up a work area and to lay cable along various routes from the customer premises to the central office serving that particular customer. The cable can be fiber or copper, and it can be placed on telephone poles (aerial), buried directly into the ground, or placed in underground manholes through the use conduit pipes between those manholes.

The BSTLM does not have a separate "fixed setup time plus cable feet per day" input to estimate outside plant costs. Instead, the set up time must be incorporated into the placing rate. BellSouth assumed an underground placing rate of 150 minutes per 100 feet for underground copper cable and 75 minutes per 100 feet for aerial copper cable. Yet, BellSouth failed to present any evidence in the record to justify the model's assumptions.

AT&T/WorldCom sponsored expert testimony that assuming a two-technician crew for placing underground cable and a one-technician crew for placing buried and aerial cable, the crew would encounter fifteen minutes of travel time and thirty minutes of setup time. (Tr. 1209) The aerial crew could reasonably place 5,000 feet of cable per day, the buried crew could place 8,000 feet of cable per day and the underground crew could place 3,000 feet of cable per day. Id. AT&T/WorldCom charge that BellSouth's inputs for aerial cable placing are illogical because the inputs assume that work will be completed in 75 minute increments, the majority of which will be consumed by travel and setup. For example, BellSouth's combined placing rate assumes that a technician crew will devote one hour to travel and set up, place 100 feet of cable in fifteen minutes and then spend another hour on travel and setup before placing the second 100 feet of cable. (Tr. 1210). AT&T/WorldCom contend that this assumption translates to an unreasonably low placing rate of 640 feet of cable per day for a two-technician crew. (Tr. 1210). AT&T/WorldCom sponsored expert testimony that proposed 0.58 hours per 100 feet which equates to an average of 4-5 manhole-to-manhole cable placements per day. (Tr. 1212). For buried cable, AT&T/WorldCom recommended 0 hours per 100 feet because BellSouth indicated that the costs are included in the buried cable contractor excavation costs. (Tr. 1212).

Discussion

The Commission agrees with the Staff recommendation to modify BellSouth's proposed cable placing inputs. BellSouth's cable placing inputs reflect poor productivity, are not substantiated by supporting documentation and do not reflect a forward-looking network. The Commission adopts the modifications proposed by Staff to reduce the copper and fiber cable placing inputs to 0.2 hours per 100 feet of aerial cable, 0 hours per 100 feet for buried cable, and 0.65 hours per 100 feet for underground cable. This equates to placement of 500 feet per hour (4,000 feet per day) for aerial cable and 308 feet per hour (2,464 feet per day) for underground cable. The Commission notes that the testimony of Donovan and Pitkin advises that 5,000 feet of aerial cable and 3,000 feet of underground cable per day are both reasonable and consistent with industry experience. (Tr. 1209-12). While this panel's testimony illustrated the flaws in BellSouth's inputs, arriving at the specific inputs necessarily involves judgment and a level of subjectivity. The Commission finds that the Staff's recommended inputs reflect a significant improvement over BellSouth's proposal. The Commission finds that it is prudent in this instance to adopt the more moderate proposal of the Staff.

3.   Cable Splicing Rates

Cable splicing is required anytime cables must be joined together. For copper cable, individual metallic cables on a pair by pair basis are joined together. For fiber cables, specialized equipment is used to join individual fibers to each other. To accomplish this, the technician must

travel to the area, set up the work area which includes stripping off the cable sheath, performing the splice, and placing a splice case over the cable joint.

(a)   Copper Cable Splicing Rate

Positions of the Parties

Unlike the placing rates, the BSTLM does have a separate setup and closure input for splicing cable. BellSouth did not utilize this capability in the model. Instead, BellSouth used a figure that combined the travel, setup and closure costs into "cable pairs spliced per hour."

BellSouth agrees with AT&T/WorldCom that the methodology that BSTLM uses to calculate the number of splices at an intersection is incorrect and that this error was discovered during the Florida UNE cost proceedings. (Tr. 224). However, BellSouth maintains that AT&T/WorldCom overstate the extent of the problem. BellSouth contends that splices occur in a number of situations, including at taper points and 4 way intersections. (Tr. 224). Thus, BellSouth witness, James Stegeman, testifies AT&T/WorldCom's assumptions that all splices are 4 way is off by 90 percent. (Tr. 224). Because of this overstatement, BellSouth advocates rejection of AT&T/WorldCom's adjustment to its model. BellSouth recommends instead that the Commission order BellSouth to correct the error and refile the model. (Tr. 225).

AT&T/WorldCom again argue that the model logic employed by BellSouth reflects poor productivity. The reason for the poor productivity is that BellSouth's model has created a linear loading factor. For instance, assuming a 400 pair cable from a central office branches out from a splice location into a 200 pair cable, 100 pair cable and a 50 pair cable, BellSouth's model calculates that three (3) different splice points and stub cables are needed with each splice requiring a separate set up. AT&T/WorldCom contend that in this instance, only one splice would be needed. To correct the model error, AT&T/WorldCom suggest that only one-third of the setup and closure time for splicing should be used. (Tr. 1217). In addition, AT&T/WorldCom argue that BellSouth has not used its own objective rates for opening and closing splices in the model. (Tr. 1217-18). Finally, AT&T/WorldCom contend that BellSouth should take advantage of the model's ability to break the splicing rate into set-up and closure and splicing. (AT&T/WorldCom Post-Hearing Brief, p. 54).

Discussion

As in most cases, the alternative rate proposed by AT&T/WorldCom is significantly lower than that proposed by BellSouth. The Commission does not find any support for BellSouth's use of model inputs for the splicing rates that are actually higher than BellSouth's own objective data. Nor does the Commission find support for BellSouth's failure to use the capability of the BSTLM to determine the splicing rate, rather than a "copper cable pairs spliced per hour." To accept BellSouth's inputs would not be in accordance with our decision in this docket to use the "bottoms-up" capability of the BSTLM to set UNE rates.

The Staff recommended that the Commission accept the inputs proposed by AT&T/WorldCom for copper cable splicing. The Commission finds that this recommendation is reasonable in order to ensure that the rates reflect those of a forward-looking network design. The Commission does not see a need to order BellSouth to correct the error and re-file the model. AT&T/WorldCom based their recommendation on information BellSouth provided during discovery and on subject matter expert opinion on the frequency that splices would be needed for various copper cable sizes. Therefore, the Commission has the proper evidence before it to decide this issue. The Commission determines that the copper cable splicing inputs used to set UNE rates in this proceeding are 0.57 hours for aerial splicing setup and closure and 0.33 hours per hundred pairs joined, 0.65 hours for buried splicing set up and closure and 0.33 hours per hundred pairs joined and 1.4 hours for underground splicing set up and closure and 0.33 hours per hundred pairs joined.

<center>(b) Fiber Cable Splicing Rates</center>

<center>Positions of the Parties</center>

Similar to its argument related to BellSouth's proposed copper splicing rates, AT&T/WorldCom again criticize the use of a linear loading factor. Also similar to copper splicing, AT&T/WorldCom argue that BellSouth failed to use the BSTLM's ability to input a setup and closure time separate from the splicing rate. (Tr. 1220). AT&T/WorldCom recommend dividing each input by three to account for BellSouth's treatment of fiber splices having triple the number of splices required. This division yields setup and closure times of 0.58 hours, 0.75 hours, and 1.25 hours for aerial, buried, and underground respectively. (Tr. 1221). The resulting problem that AT&T/WorldCom cite remains that BellSouth's methodology overstates the costs for placing the cable. (Tr. 1219). Furthermore, AT&T/WorldCom assert that BellSouth's own internal objective productivity rates assume more fibers joined per hour than what BellSouth used in the cost model. (AT&T/WorldCom Post-Hearing Brief, p. 59).

Except for the arguments regarding the copper cable splicing rate set forth above, BellSouth did not address this issue in testimony or in its post-hearing brief filed with this Commission.

<center>Discussion</center>

The Commission agrees with the Staff's recommendation to adopt the modifications proposed by AT&T/WorldCom for this input. As with copper cable, the Staff's recommendation reflects BellSouth's own objective data, the inputs required for the rates to reflect a forward-looking network, and are reasonable based on the evidence in the record. Therefore, the Commission finds that the fiber cable splicing rates should be 0.58 hours for aerial splicing set up and closure and 0.25 hours per fiber joined, 0.75 hours for buried splicing set up and closure and 0.25 hours per fiber joined and 1.25 hours for underground splicing set up and closure and 0.25 hours per fiber joined.

4.   Aerial Structure

<u>Positions of the Parties</u>

First, BellSouth argues that the contract labor costs included in the study for placing poles is correct. Through the testimony of D. Daonne Caldwell, BellSouth responds to the argument advanced by AT&T/WorldCom that the costs of placing poles were included without credit being taken for the number of poles placed. This argument pertains to "Place Poles in Power" and "Place Carry-In Pole" costs. BellSouth calculated the contractor labor cost by dividing the costs for poles by the number of poles placed. BellSouth does not dispute that the failure to recognize all of the poles placed would result in an inflated cost per pole placed, but it maintains that no such omission took place. Ms. Caldwell explained that BellSouth incurs additional contractor costs, over and above standard labor costs associated with placing poles. The two examples cited by AT&T/WorldCom refer to the incremental costs related to placing poles in existing power lines, and having to carry a pole to a location. (Tr. 627). BellSouth includes the number of poles associated with these additional costs in the count of poles placed using direct labor. (Tr. 627).

Ms. Caldwell's testimony also responds to the criticism related to BellSouth's spacing input of 149 feet. Even though BellSouth previously agreed that use of the BCPM, HAI and hybrid cost proxy model ("HCPM") default value of pole spacing of not less than 150 feet was appropriate, BellSouth has since determined, based on analysis specific to Georgia, that these default model values are overstated. (Tr. 627-28). BellSouth states that span lengths may be as much as 250 feet, but there are instances in which several poles intersect in close proximity to each other. (Tr. 628). In addition, BellSouth indicates that design limitations affect pole spacing. (Tr. 628). BellSouth claims that the pole spacing input of 149 feet is conservative because the actual pole spacing may be closer to 100 feet. (Tr. 628).

In addition to the argument discussed above related to the additional labor costs, AT&T/WorldCom contend that BellSouth did not use a reasonable average distance between poles. First, AT&T/WorldCom state that BellSouth previously used a distance of greater than 149 feet between poles in the BCPM. (AT&T/WorldCom Post-Hearing Brief, p. 64). Next, AT&T/WorldCom point out that BellSouth made a calculation error by adding one extra pole per 1,000 feet. According to AT&T/WorldCom, adjusting BellSouth's calculations to correct this error results in an average distance between poles of 176 feet. (AT&T/WorldCom Post-Hearing Brief, p. 65).

<u>Discussion</u>

The Staff recommended that the Commission adopt for use in determining UNE rates in this proceeding a contract labor cost for aerial structure of $207.98 for all pole types and an average distance of 164 feet between poles. The Commission adopts this recommendation for the reasons discussed herein. BellSouth convincingly refutes AT&T/WorldCom's argument concerning a calculation error in the aerial structure input. But, having reviewed the testimony of both companies, the Commission finds that BellSouth did not make any adjustments to its embedded or historical data. For example, the number of poles modeled appears to be based on ARMIS data instead of what a forward-looking, least cost, most efficient network would use.

BellSouth did not provide any testimony that its current telephone pole placement practices were forward-looking. Because of this flaw in the methodology, the Staff adjusted BellSouth's proposal by approximately 10 percent to account for a network design that is least cost and forward-looking.

The Commission adopts the Staff's recommendation of 164 feet between poles and a contract labor cost of $207.98 for all pole types. This determination is a compromise between the recommendations of BellSouth and AT&T/WorldCom. It appropriately accounts for failures within BellSouth's recommendation to make the necessary adjustments to arrive at a forward-looking rate, while also taking into consideration that AT&T/WorldCom's recommendation was based in part on assumptions that the evidence did not adequately support.

5. Buried Structure Inputs

Positions of the Parties

The buried structure inputs in the BSTLM address excavation costs for excavation, laying cable, and restoration costs needed to restore the ground where the cable was buried. Buried cable can be laid using a bore to drill a hole in the soil, plowing or a trenching. Once the cable is laid, the BSTLM has inputs that include the cost to restore asphalt, concrete or sod depending on where the cable was buried.

BellSouth contends that the buried structure inputs used in the BSTLM are correct. BellSouth defends its practice of using the same cost for trenching and plowing by offering background into its contracts with outside plant contractors. Since 1995, the company negotiated contracts with outside plant contractors to pay "any method for placement" for administrative and audit purposes meaning that with only a few exceptions, BellSouth negotiated for a single price for buried excavation. (Tr. 629). Therefore, BellSouth is charged a single price per foot regardless of whether the contractor plows, uses a backhoe or hand trenches. The single price, according to BellSouth, represents an average for all types of buried excavation that BellSouth has negotiated with its contractors. (Tr. 629).

BellSouth contends that the input modifications requested by AT&T/WorldCom to its excavation activity percentages are arbitrary because only selected modifications were made. (Tr. 630). BellSouth argues that by accepting its proposed percentage of time for normal terrain, but then applying that percentage to all types of terrain, AT&T/WorldCom underestimate the time needed for excavation. (Tr. 630). While admitting that the percentage of time that particular excavation activities occur is not significant, BellSouth argues that when these percentages are multiplied by the unrealistically low price per foot for plowing that AT&T/WorldCom advocate it substantially understates BellSouth's excavation costs. (Tr. 630-31).

BellSouth also argues that it appropriately spread the costs for restoration over buried cable placements, underground placements, buried boring and underground boring. BellSouth contends that its proposed method to recover these restoration costs is straightforward and accurate. In sum, BellSouth states that these costs have to be spread somewhere, and that if they weren't associated with boring, then they would have been spread to, and increased the costs of, the remaining boring activities. (Tr. 632).

The issue related to steel pipe, PVC pipe and Flex-pipe is whether the related costs should be included with push pipe and pull cable ("PPPC") or spread over total boring activity costs. BellSouth included spread the costs over total boring activity costs. It defends this decision by pointing out that under its vendor contracts the costs for Steel Pipe, PVC pipe and Flex pipe used by BellSouth are actual incurred costs as a result of directional boring. (Tr. 632). According to BellSouth, its method for allocating these costs is a reasonable and factually based approach for identifying the pipe costs, and it does not imply that every foot of boring requires a pipe of some sort. (Tr. 632).

BellSouth also refutes AT&T/WorldCom's argument that inappropriate costs are included in the buried cable (excavation) costs. BellSouth argues that these are the real costs for burying cable, and BellSouth included a complete list of all items included in the buried cable placement costs. (Tr. 633).

AT&T/WorldCom made several arguments regarding modifications to BellSouth's buried structure inputs. First, AT&T/WorldCom address BellSouth's point that its contracts do not distinguish between types of excavation. AT&T/WorldCom argue that this statement by BellSouth is misleading because the cost study BellSouth filed makes this distinction. (AT&T/WorldCom Post-Hearing Brief, pp. 65-66). AT&T/WorldCom charge that BellSouth inappropriately distinguished the inputs it used only for the higher cost activities such as Bore Buried Cable and Push Pipe/Pull cable. Id. at 66.

Next, AT&T/WorldCom argue that although BellSouth's contractor data lists Place Cable, costs are reflected only for trenching activities and not for the lower costs of plowing. Id. In addition, even though plowing is much less costly than trenching, BellSouth has used the same costs for trenching and plowing. Id. The result is that BellSouth has inflated the cost of plowing. AT&T/WorldCom conclude that the inclusion of the inefficient procurement methods employed by BellSouth are inconsistent with TELRIC principles. Id.

AT&T/WorldCom set forth a number of reasons for the Commission to disallow BellSouth's practice of taking a conglomeration of restoration costs, declaring them restoration activities and spreading them on a per foot basis into buried cable and bore buried cable. First, restoration costs are not applicable to cable boring and plowing operations. (Id. at 67). Second, there is significant contractor data about these assembled costs that BellSouth claimed it could not calculate separately. AT&T/WorldCom proposed that the buried excavation inputs be revised, not to eliminate the costs, but to ensure that restoration costs are only included in the proper categories. Id. at 67-68. Third, AT&T/WorldCom argued that the costs for furnishing and placing certain corrugated pipe should not be included in the buried cable restoration costs because buried cable is placed in dirt rather than pipe. Id. at 68.

AT&T/WorldCom raise similar problems in connection with BellSouth's cost allocation for buried splice pits. BellSouth has distributed the contractor costs for buried splice pits evenly across the buried structure categories. According to AT&T/WorldCom, splice pits are not normally used in buried splicing operations because the splices are placed in pedestals. Id. Since BellSouth's contract costs indicate that splice pits are for existing plant, not new outside plant, these costs should not be included in TELRIC direct cost calculations. Id. at 69.

On the issue of buried cable inputs, AT&T/WorldCom again dispute BellSouth's inclusion of certain costs. Specifically, AT&T/WorldCom argue that BellSouth's inclusion of the cost of steel pipe, PVC pipe, and Flex-pipe into the bore buried cable contractor costs is inappropriate. Id. Boring for buried cable involves a drilling device that bores holes in the soil under the pavement. After the hole is bored, the cable is pulled through the dirt. Id. Since buried cable does not use pipe, AT&T/WorldCom contend that the above-listed types of pipe should be included in the PPPC category. Id.

Discussion

Buried structure costs are tedious and detailed, and the Commission appreciates the time the parties have spent reviewing the data. The Staff recommended that the Commission adopt BellSouth's inputs for buried structure costs. The Commission has reviewed the arguments by AT&T/WorldCom, BellSouth as well as the evidence in the record and agrees with the Staff recommendation.

Most of BellSouth's buried structure inputs are based on contracts negotiated with contractors for a single price for excavation activities. This single price allows BellSouth to obtain all types of buried excavation without additional costs. AT&T/WorldCom present alternative methodologies for categorizing these costs. However, as BellSouth pointed out in connection with restoration costs, the costs have to be spread somewhere. The reduction of one category of costs may just result in an increase to another category of costs. BellSouth's proposed cost allocations are logical and straight-forward. The Commission is also concerned that some of the adjustments proposed by AT&T/WorldCom would result in rates that are lower than what TELRIC requires. Therefore, the Commission adopts Staff's recommendation to accept BellSouth's inputs for buried structure costs.

6. Underground Structure

Positions of the Parties

The issues involved with BellSouth's underground structure are similar to the issues brought up in the context of buried cable costs. Specifically, the parties dispute whether BellSouth's cost studies are oversimplified and inaccurate. BellSouth, of course, argues that the excavation activity percentages used in the cost study for boring and other underground structure costs are correct. BellSouth dismisses AT&T/WorldCom's proposed reductions to the percentage from its cost study because the reduction is based on data from one year in which the amount of boring was very small. (Tr. 633-34). BellSouth states that a TELRIC analysis would show that the amount of boring activity is actually higher. (Tr. 633-34). In addition, BellSouth network personnel familiar with Georgia reviewed and approved the input BellSouth used in the cost study. (Tr. 634).

As referenced above, AT&T/WorldCom contend there were errors in BellSouth's contract labor cost inputs for underground cable excavation similar to those they claimed existed in the buried cable costs. AT&T/WorldCom find fault with BellSouth's use of a higher cost category, "Bore Underground Cable," to differentiate the underground cost by density zone when there are eight

separate underground conduit placing input categories available. (AT&T/WorldCom Post-Hearing Brief, p. 71). According to AT&T/WorldCom, boring cable under the surface is rarely used in underground plant. Id. AT&T/WorldCom recommend that the Commission modify BellSouth's input percentages for boring by using the relationships between the various density zones that BellSouth used and the amount of sheath distance by density zone. Id. at 72. AT&T/WorldCom also recommended that the restoration costs for asphalt, concrete and sod be re-allocated to the appropriate categories, rather than BellSouth's method of spreading these costs across all types of excavation as BellSouth has done. Id.

<u>Discussion</u>

The Staff recommended that the Commission accept AT&T/WorldCom's modifications to the underground excavation activity percentages in BellSouth's cost study. Underground structure costs have a significant impact on loop-related UNE rates. The Commission adopts the Staff's recommendation.

The evidence reflects that it is rare for duct banks between manholes to need subsurface boring. (Tr. 1237). The evidence also indicates that subsurface boring is necessary only to cross under an interstate highway or a railroad line in the rare circumstance in which there is no overpass or underpass. BellSouth's own data establishes that boring occurs on average 0.75 percent of the time. (Tr. 1238). AT&T/WorldCom recommend using BellSouth's existing relationships between the various density zones and the amount of sheath density within density zones to develop the percentages for rural, suburban and urban areas. This results in the following percentages for underground boring: 0.16 percent for rural areas, 0.35 percent for suburban areas and 0.75 percent for urban areas. (Tr. 1238). The Staff recommends that the Commission adopt these percentages. The Commission finds Staff's recommendation reasonable.

(a)   Manhole Inputs

<u>Positions of the Parties</u>

On the issue of manhole inputs, BellSouth's application of both a miscellaneous contractor cost factor and a miscellaneous material loading factor are in dispute. BellSouth argues that while the miscellaneous material loading factor is typically derived as a percentage of non-exempt material and then applied to forward-looking non-exempt material, it was justified in deriving its inputs differently in this instance. The BSTLM includes conduit in other calculations, and not in the material calculations. (Tr. 634). As a result, BellSouth claims that if it were to follow the typical application methodology discussed above, the factor would be applied to $0 material costs and the miscellaneous costs would be understated. (Tr. 634). It was this alleged understatement of costs that prompted BellSouth to propose a different method for deriving its manhole input. BellSouth explains that it applied the miscellaneous loading factor to conduit costs outside of the BSTLM in order to properly compute its miscellaneous conduit costs. (Tr. 634). In addition, the miscellaneous cost factor allows BellSouth to recover the miscellaneous contractor costs that are spread among all outside plant contractor activities. (Tr. 635).

AT&T/WorldCom contest the inclusion of these miscellaneous costs. AT&T/WorldCom's position simply is that manhole costs do not include these miscellaneous costs. This "miscellaneous stuff," as AT&T/WorldCom refer to it, is unnecessary for manholes and manhole covers. (AT&T/WorldCom Post-Hearing Brief, p. 72). In addition, AT&T/WorldCom propose modifications to the manhole sizes that BellSouth has used in the BSTLM. According to AT&T/WorldCom, a 504 cubic foot manhole for 5 cables is inconsistent with TELRIC because it is larger and more expensive than required. Id. at 73. AT&T/WorldCom propose a 72 cubic foot manhole that can handle three cables and a 224 cubic foot manhole that can handle 5 or more cables. Id.

Discussion

The Staff recommended that the Commission adopt manhole inputs that reflected a reduction to BellSouth's proposed underground contract labor costs for manholes. Specifically, the Staff recommended that the Commission find that $2,175.22 for manholes housing 1 to 3 cables and $8,077.35 for manholes housing 5 or more cables is reasonable. The Commission adopts this recommendation based on the evidence in the record, which establishes that extra costs are not needed for manholes and manhole covers. BellSouth appeared to acknowledge that it was deviating from the typical methodology when it included the miscellaneous costs into its calculations for manhole inputs. BellSouth's reasoning is not persuasive given that manholes do not need "climbers," and "working from a ladder costs" are not needed to install manholes. As AT&T/WorldCom state, "[a] manhole is a manhole." Extra exempt material items are not needed. In addition, the Commission agrees with AT&T/WorldCom that the inputs should not reflect a manhole size that is larger and more expensive than required. The evidence supports that BellSouth's proposals inflate costs by using a larger cubic foot manhole than necessary to accommodate the applicable number of cables. Therefore, it is logical to conclude that a 72 cubic foot manhole can be used for up to 3 cables and a 224 cubic foot manhole can be used for 5 cables.

However, given the large disparity between the rates proposed by AT&T/WorldCom and BellSouth for 224 cubic foot manholes and 72 cubic foot manholes, a conservative approach is warranted to ensure that the approved rate accounts for the true costs without including inefficiencies. The Commission adopts the Staff recommendation to adjust AT&T/WorldCom's rate by $2,000 as a reasonable midpoint range between the competing proposals.

7.   Structure Sharing

Positions of the Parties

Structure sharing occurs when BellSouth's outside plant is laid along the same route as outside plant for other companies, such as electric and cable companies. In such instances, a forward-looking network design incorporates the decreased structure costs that come from BellSouth sharing structure with other companies.

BellSouth contends that AT&T/WorldCom's proposal to increase BellSouth's buried and underground sharing inputs, but not to alter BellSouth's aerial sharing percentages, is unrealistic.

BellSouth charges that the motivation behind this recommendation is that the universal service fund input for aerial structure would increase, not decrease, the cost of a loop. (BellSouth Post-Hearing Brief, pp. 37-38). Further, BellSouth contends that it is inappropriate, according to the FCC, to rely on decisions in a UAF proceeding to set UNE rates. (Tr. 635).

BellSouth sponsored testimony that sharing of underground structures rarely occurs due to difficulties encountered in work coordination, safety, and available space considerations. As a result, BellSouth rarely, if ever, jointly places conduit with another party. (Tr. 636).

BellSouth testifies that while it leases conduit space to other parties, the "[e]xpenses associated with BellSouth's leasing of duct space in other parties' ducts are netted with revenues received from other parties leasing BellSouth owned ducts and included in the plant-specific expenses." (Tr. 636). AT&T/WorldCom failed to account for the expenses; and therefore, their proposal double counts the actual sharing. (Tr. 636). BellSouth used the percentage of duct space leased to other parties as a basis for its proposed structure sharing input. (Tr. 636). BellSouth dismisses AT&T/WorldCom's comparisons to Verizon's experience in New York as being irrelevant due to the customer dispersion and density differences between Georgia and Manhattan and being meaningless because of the ambiguity concerning what the Verizon figures reference. (Tr. 637).

BellSouth assumed that it would share buried excavation with another party 13 percent of the time. BellSouth argues that such sharing opportunities today are limited due to timing issues with other utilities. (Tr. 638).

AT&T/WorldCom argue that BellSouth does not assume sufficient structure sharing percentages. (AT&T/WorldCom Post-Hearing Brief, p. 72). Structure sharing percentages should recognize emerging competitive realities in order to be forward-looking. AT&T/WorldCom argue that BellSouth's percentages are not consistent with FCC structure sharing rules. AT&T/WorldCom argue that the FCC has recognized that structure sharing opportunities are increased in a forward-looking environment and has made it clear that BellSouth's historical practices are not relevant. Id. at 74. AT&T/WorldCom advocate using the structure sharing inputs consistent with its recommended 50 percent for the structure in rural areas and 33 percent of the structure in suburban areas. Id. at 77.

Discussion

A preliminary question that must be answered to arrive at an appropriate percentage is whether a forward-looking model would reflect increased or decreased opportunities for shared structure. The record contains expert testimony on both sides of this issue. The Commission Staff has recommended that BellSouth bear 80 percent of the structure costs for underground structure and 70 percent of the costs for buried structure. The Staff recommendation did not include a distinction in the percentages between rural and urban. The Commission agrees with the Staff's recommendation based on the record in this proceeding. The Commission is persuaded that in a forward-looking environment more sharing of facilities would occur – both with others as well as within BellSouth's own network.

In reaching this determination, the Commission considers the testimony of Mr. Donovan on behalf of AT&T/WorldCom that states that shared structures are encouraged among planning engineers. (Tr. 1246). This testimony seems reliable in light of the cost-saving opportunities presented by structure sharing. The Staff recommendation that the Commission is adopting modified the recommendations of AT&T/WorldCom. The reason for the modification was that BellSouth's testimony on AT&T/WorldCom's failure to fully account for the expenses that accompany structure sharing was persuasive. However, in a forward-looking environment BellSouth should be able to lower its costs through finding more opportunities to share and to reduce the corresponding expenses. The Commission does not need, as BellSouth cautions against, to rely upon the Universal Service model, to conclude that a forward-looking model should incorporate an increase in shared structure.

8. Facility Sharing

Positions of the Parties

Facility sharing should occur when distribution and feeder cable are laid along the same route. This prevents duplicative costs for structure needed to house separately the distribution and feeder cable.

BellSouth states that the facility sharing inputs proposed for the cost study are based on its experience that facility sharing occurs very infrequently. (Tr. 639). BellSouth criticizes the testimony of Messrs. Donovan and Pitkin as lacking any support beyond their own expectations. (Tr. 639).

AT&T/WorldCom argue that BellSouth does not assume sufficient facility sharing within its own network. BellSouth's "bottoms-up" version of the BSTLM assumes that BellSouth's feeder and distribution cables laid along the same route only share cable structure 25 percent of the time. Thus, each one requires its own duplicative structure 75 percent of the time. AT&T/WorldCom argue that BellSouth does not provide any evidence to support this assumption. (Tr. 1248). AT&T/WorldCom believe that facility sharing will occur much more frequently in a forward-looking environment and recommend changing this input to reflect that feeder facilities "ride on" or share the same structure already built by distribution plant 75 percent of the time. (Tr. 1248). AT&T/WorldCom assert that this recommendation is conservative because the BSTLM also does not share any of the structure for loop plant with cables used to provide transport services. (AT&T/WorldCom Post-Hearing Brief, p. 78).

Discussion

The Staff recommended that the Commission adjust BellSouth's input to require facility sharing 30 percent of the time when distribution and feeder cable share a single route. The Commission finds this recommendation reasonable. This issue highlights the subjectivity inherent in some of the differences between the parties. While sound ratemaking principles are necessary to ensure that the decision falls within a zone of reasonableness, there is not one precise correct percentage. In this instance, both BellSouth and AT&T/WorldCom staked out positions that, to be generous, would be on the rim of the zone of reasonableness. Facility sharing should occur in

a forward-looking network more often than BellSouth contends, but the record does not support AT&T/WorldCom's proposal of 75 percent for facility sharing.

Both parties emphasize a lack of support for the others' recommendation on this issue. BellSouth is correct that AT&T/WorldCom based their recommendations on their expectations. However, these expectations were those of expert witnesses who provided reasons in support of these expectations. Therefore, the testimony is deserving of consideration. The testimony does, in fact, illustrate flaws in the assumptions underlying BellSouth's proposed costs. That said, AT&T/WorldCom did not provide an adequate basis for the leap from BellSouth's proposal to its recommendation. The Commission finds that the Staff's recommendation is a reasonable, logical compromise that is supported by the record.

9. Engineering Factors

Positions of the Parties

Engineering costs are a necessary part of designing outside plant. BellSouth uses an engineering factor in the cost study to recover these costs. The factor is based on the relationship between engineering costs and non-engineering investments.

BellSouth and AT&T/WorldCom differ in their assessment of the ratio between engineers and technician. This difference is responsible for part of the difference in their recommended engineering factors. BellSouth states that the ratio, based on year 2000 data is 1:2.8. (Tr. 650). AT&T/WorldCom arrive at the substantially different ratio of 1:6. (Tr. 1267). This difference results from BellSouth relying on a single year's experience, while AT&T/WorldCom rely on the engineering supervisory experience of its witnesses.

BellSouth claims that, regardless of the experience of Messrs. Donovan and Pitkin, the 1:6 relationship between engineers and technicians does not exist. (BellSouth Post-Hearing Brief, p. 39). BellSouth states that over the most recent four-year period, it did not have a 1:6 ratio for a single plant account. Id. Consequently, BellSouth argues that AT&T/WorldCom does not have any legitimate basis for its conclusion that BellSouth would be able to achieve such a 1:6 ratio on average for all accounts on a going forward basis. (Tr. 650). BellSouth claims that adoption of AT&T/WorldCom's recommendation would "dramatically" slash its engineering factor. (Tr. 650).

As discussed above, AT&T/WorldCom assert that BellSouth's engineering factor is overstated. This overstatement is the result of BellSouth's factor assuming that an unreasonably large number of engineers are required to provide engineering services. (AT&T/WorldCom Post-Hearing Brief, p. 83). AT&T/WorldCom references a "span of control" concept to determine a ratio of engineers to construction technicians. The traditional ratio has been one (1) engineer per six (6) construction laborers or a 1:6 ratio. (Tr. 1267). In the embedded engineering data provided by BellSouth to support its engineering "factor," the "span of control" varies between one (1) engineer per 17.5 construction laborers to a ratio of 1.43 engineers to 1 construction laborer. (AT&T/WorldCom Post-Hearing Brief, p. 83). According to AT&T/WorldCom, the ratio of 1.43 engineers per construction laborer results in the incredible conclusion that BellSouth believes that it requires more time to engineer than to build particular outside plant. Id.

AT&T/WorldCom have additional problems with BellSouth's proposed engineering factor. In BellSouth's "bottoms-up" version of the BSTLM, an engineering factor is applied to all telephone labor, contract costs and material cost developed by BSTLM. AT&T/WorldCom claim that this application is not appropriate because engineering costs are based on labor hours involved in installing the equipment, not the cost of the equipment itself. (AT&T/WorldCom Post-Hearing Brief, p. 81). AT&T/WorldCom cite to a letter from BellSouth counsel filed in this docket that states BellSouth's "internal cost estimating system, OSPCM...engineering factors...are applied to *labor* costs. The BSTLM, however, was programmed to apply the factors to Telco labor, contractor costs, and *material* cost."[5] (Tr. 1264) (emphasis added). In summary, AT&T/WorldCom claim that BellSouth's current proposal leads to anomalous results because its engineering factor is applied to equipment when it should only be applied to labor hours involved in installation efforts.

However, AT&T/WorldCom stated that the rigidity of the BSTLM together with the inability to use the source code for the model prevented them from adjusting the BSTLM to base engineering costs on labor instead of material. (AT&T/WorldCom Post-Hearing Brief, p. 82). Without changing the model logic, AT&T/WorldCom advocates the use of the total cost of engineering, labor and material by Field Reporting Code ("FRC") that BellSouth provided, and calculate the forward-looking cost of engineering as a percent of labor. Id. at 83. AT&T/WorldCom argue that this method is preferable to allowing BellSouth to use a single year of data to develop an average engineering ratio. Id.

The recommendations of Allegiance are consistent with those of AT&T/WorldCom. Allegiance agrees with AT&T/WorldCom that the cost for engineering outside plant should be based upon the labor involved, not the material. Accordingly, Allegiance recommends that the Commission require BellSouth to modify the logic of the BSTLM to allow engineering costs to be based upon direct labor plus contract direct labor. In addition, Allegiance argues that the ratio of engineering to labor should reflect a more realistic span of control than what BellSouth has proposed. (Allegiance Post-Hearing Brief, p. 28).

Discussion

The task for this Commission is to determine a reasonable engineering loading factor based on a forward-looking network. First, as we have indicated herein, if at all possible, linear factors should not be used to recover costs in a "bottoms-up" methodology. Second, we find that BellSouth's factor is based on its historical and embedded costs. BellSouth's arguments on the engineering ratios are within the realm of reasonableness. Although AT&T/WorldCom maintain that BellSouth's engineering factor is overstated, the testimony that over the past four years BellSouth did not achieve the 1:6 ratio for a single plant was not directly contradicted. However, BellSouth's proposed engineering factor was based on embedded costs. In an effort to reflect forward-looking efficiencies, the Staff has modified BellSouth's factor. The Staff's modification reduces BellSouth's engineering costs by 10.2 percent, compared to the 50 percent advocated by AT&T/WorldCom. The Staff's recommended reduction is based on a 30.31 percent engineering

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[5] Letter from Mr. Bennett L. Ross to Mr. Reece McAlister, Georgia Public Service Commission, Docket No. 14361-U, February 15, 2002, page 1.

to labor ratio or an engineering/technician span of control of 1 engineer to every 3.3 technicians. The Commission finds that this span of control is easily attainable in a forward-looking environment and adopts Staff's recommendation.

10. Cost of Capital

Positions of the Parties

The Federal Act allows incumbent local exchange carriers to earn a reasonable return on their investment. 47 U.S.C. §252(d)(1)(B). The overall cost of capital is determined by estimating the cost of debt and the cost of equity, and calculating the weighted average cost of capital. Because debt payments are fixed, the cost of debt can be directly computed. On the other hand, the cost of equity is more complex to calculate and can be estimated using several different methodologies. Two of the most common methodologies used to estimate the cost of equity are the discounted cash flow ("DCF") method and the capital asset pricing model ("CAPM").

In Docket No. 7061-U, the Commission adopted an overall cost of capital for BellSouth of 9.27 percent. (Docket No. 7061-U; Commission Order, p. 29). Under the Third Amended Procedural and Scheduling Order, the Commission required BellSouth to incorporate this cost of capital into the cost study filed in this docket.

In this proceeding, BellSouth proposes an increased cost of capital of 11.25 percent. (BellSouth Post-Hearing Brief, p. 17). BellSouth witness, Randall S. Billingsley, used the single-stage DCF model, the CAPM, and the risk premium approach to reach a current cost of equity that falls within a range of 12.75 percent to 14.07 percent. (Tr. 920).

In arriving at this cost of equity range, BellSouth used a group of 20 companies from a population of 295 firms. BellSouth performed what is known as a cluster analysis to select this group of companies. While acknowledging that individually the companies are not precisely like BellSouth in terms of risk, Dr. Billingsley testifies that based on the measures of risk that BellSouth uses, the 20 companies as a group are comparable in risk to BellSouth. (Tr. 934-35).

BellSouth argues that the current forward-looking cost of debt should be 7.58 percent. (Tr. 941). Dr. Billingsley derived this cost of debt through an analysis that involved the recent average yield to maturity on 30-year U.S. Treasury bonds and Aa-rated public utility bonds. (Tr. 941). Using a current cost of debt of 7.31 percent and a cost of equity from 12.75 percent to 14.07 percent, BellSouth asserts that its calculations demonstrate the overall cost of capital for BellSouth is the range of 11.89 percent to 13.0 percent. (Tr. 950-51). Therefore, BellSouth argues that its proposed 11.25 percent rate is a conservative rate that actually understates BellSouth's forward-looking overall cost of capital. (BellSouth Post-Hearing Brief, p. 17). BellSouth also argues that its recommended cost of capital is comparable to the cost of capital of gas and power companies. Id. at 17-18. BellSouth asserts that it would be nonsensical to conclude that BellSouth, a company in a fully competitive environment, would have a cost of equity lower than traditional, rate of return regulated companies. Id. at 18.

AT&T/WorldCom argue that BellSouth's proposal is unreasonable and contradicts the findings of this Commission in Docket No. 7061-U. AT&T/WorldCom also stress that the burden of proof is on BellSouth to justify why the cost of capital should be increased. AT&T/WorldCom argue that BellSouth has failed to meet that burden (AT&T/WorldCom Post-Hearing Brief, p.192). In support of their position, AT&T/WorldCom offer their own calculation of BellSouth's cost of capital. Based on an average of the three-stage DCF method and the CAPM method, AT&T/WorldCom determined that BellSouth's cost of equity should be 10.53 percent. Id. at 193.

AT&T/WorldCom sponsored the testimony of John I. Hirshleifer to respond to the testimony of Dr. Billingsley. Mr. Hirshleifer selected a comparison group of six large publicly traded telephone holding companies with major interests in telephone networks. To estimate the cost of equity for the companies in this comparison group, Mr. Hirshleifer used two alternative methodologies: (a) three-stage DCF methodology based upon the future dividends for the comparable group of companies identified in step one and (b) the CAPM, in which a "risk premium" was calculated for the comparable companies and then added to a risk free rate of return. (Tr. 1810, 1833).

Mr. Hirshleifer criticizes BellSouth's use of a single stage DCF Model. He asserts that BellSouth's model assumes that above-average growth rates projected for the next 3-5 years will continue forever. (Tr. 1866). This assumption on the part of BellSouth artificially inflates the return on equity for these companies. (Tr. 1866). AT&T/WorldCom also argue that BellSouth's DCF comparison group is inappropriate for this proceeding. AT&T/WorldCom note that Mr. Hirshleifer used other regional telephone holding companies in their DCF comparison group, while none of the 20 companies used by BellSouth is engaged in a business similar to BellSouth. (AT&T/WorldCom Post-Hearing Brief, p. 198). For example, AT&T/WorldCom points out that BellSouth's cluster analysis includes Anheuser Busch, without explaining how the risk of selling beer is similar to the risks faced by BellSouth. Id. at 198-99.

Mr. Hirshleifer asserts that reported data on the forward-looking debt costs incurred by BellSouth as of June 2001 indicates that a debt cost of 6.89 percent is appropriate. Mr. Hirshleifer testifies that it is more appropriate to use BellSouth's own data than that of other public utilities, and that BellSouth uses its own data unless data from other companies increases rates. (Tr. 1879-80).

By combining the calculated cost of equity of 10.53 percent and cost of debt of 6.89 percent, AT&T/WorldCom determined that the cost of capital falls within a range of 8.75 percent to 9.62 percent. AT&T/WorldCom found the midpoint of those numbers to be 9.18 percent, which they propose this Commission adopt as the appropriate cost of capital. In support of their position, AT&T/WorldCom point out that this figure is similar to the cost of capital ordered by this Commission in Docket No. 7061-U. (AT&T/WorldCom Post-Hearing Brief, p192).

<u>Discussion</u>

The FCC has held that the TELRIC pricing methodology provides for the "reasonable profit" that is permitted under Section 252(d)(1)(B) of the Federal Act. (First Report and Order, CC

Docket No. 96-98, ¶ 699). In finding that an 11.25 percent rate of return was reasonable, the FCC stated that it would not "engage in a time-consuming examination" of the current marketplace to determine whether the percentage was too high. Id. at ¶702. Instead, the FCC stated that the states were free to find that a higher or lower rate was appropriate. Id. In Docket No. 7061-U, the Commission found that 9.27 percent was the appropriate cost of capital. The United States Supreme Court's decision that an 11.25 percent cost of capital rate was a reasonable starting point again emphasizes that the FCC granted individual states the authority to modify the rate. Verizon Communications, Inc. v. FCC, 122 S.Ct. 1646, 1677. In addition, the Supreme Court noted that competition has been slow to materialize in local exchange retail markets. Id.

In the analysis of the evidence and the determination of the appropriate capital structure, cost of debt and cost of equity, this Commission must determine that the return on common equity set in this proceeding is commensurate with returns on investments and enterprises with similar risks; that the return is adequate to ensure the confidence of the financial markets; and is sufficient to allow the company to maintain its credit worthiness and to allow it to attract capital as required on reasonable terms.

AT&T/WorldCom argued that BellSouth had the burden of proof to demonstrate why the cost of capital should be increased from the 9.27 percent in the last proceeding. BellSouth did not address the issue of burden of proof. The Commission agrees that the starting point for this proceeding is 9.27 percent (in fact, the Commission established as much in its Third Amended Procedural and Scheduling Order), and concludes that BellSouth does bear the burden of proof in connection with a recommendation to increase it from 9.27 percent. Likewise, however, AT&T/WorldCom bear the burden in relation to their recommendation to decrease the cost of capital to 9.18 percent.

BellSouth has not met its burden of proof to establish that a higher cost of capital should apply in this proceeding. There is no indication that competition in the telecommunications market has increased so significantly that the market risk to BellSouth warrants the Commission establishing an 11.25 percent cost of capital. In fact, as referenced above, the U.S. Supreme Court has reached the opposite conclusion about the progress of competition.

The Commission also has problems with the methodology employed by BellSouth. First, the methodology used by BellSouth overestimates its cost of equity. The Commission previously indicated that differences in recommendations for the cost of capital are often based upon the comparison or proxy groups used in the financial models. And, as the Commission determined in Docket No. 7061-U, an analysis using "BellSouth, the Bell Regional Holding Companies, and a group of independent telephone companies" is more appropriate than one using non-utility companies. The Commission consequently does not accept the comparables selected based on the "cluster" methodology used by BellSouth. As pointed out in AT&T/WorldCom's brief, BellSouth did not adequately demonstrate why the risks of the companies in the cluster group were comparable to those of BellSouth. (AT&T/WorldCom Post-Hearing Brief, p. 198-99). In addition, the Commission finds that BellSouth has inflated the cost of debt compared to what is established by its own data. AT&T/WorldCom's recommended 6.89 percent estimate of the cost of debt was based on BellSouth's actual forward-looking yields. (Tr. 1879). This percentage

compares to the 7.31 percent recommended by BellSouth. Last, BellSouth did not use an appropriate capital structure to determine the cost of capital for the use of network elements. BellSouth should have used a forward-looking target capital structure for the business of leasing network elements, rather than using the average market-value capital structures of companies such as Coca-Cola, which are not similar to BellSouth (which itself owns LECs and network elements). This Commission found in Docket No. 7061-U that there was no clear evidence of how a forward-looking target capital structure would vary from BellSouth's actual capital structure. (Commission Order, p. 28). The Commission therefore concluded that it was appropriate to use BellSouth's actual capital structure. Id. The Commission again finds that actual capital structure adequately reflects what is likely to be a forward-looking capital structure.

The Commission's findings in Docket No. 7061-U regarding BellSouth's cost of capital remain reasonable, appropriate, reflect a forward-looking approach and will allow BellSouth the opportunity to earn a fair, just and reasonable return on equity for purposes of establishing cost-based rates in this proceeding. The Commission therefore concludes that the overall cost of capital for computing costs in this proceeding should be 9.27 percent. The Commission is in agreement with much of the testimony sponsored by AT&T/WorldCom on this issue. The difference between a cost of capital of 9.27 percent and the 9.18 percent recommended by AT&T/WorldCom is slight enough to result more from minor adjustments that conflicts in principle. While the arguments advanced by AT&T/WorldCom effectively refuted BellSouth's proposal, it did not meet a burden that the current cost of capital percentage should be modified.

11.   Depreciation

Positions of the Parties

Depreciation lives are the periods of time over which the cost of assets expected to wear out or become obsolete are allocated in order to provide recovery of those costs. Depreciation expense is a major cost that must be considered in establishing the cost-based rates in this proceeding. The rates proposed by BellSouth and AT&T/WorldCom contain assumptions about depreciation expense based on proposed lengths of depreciation plant lives. Shorter depreciation plant lives result in higher network element rates because a greater share of the cost of the investment in equipment is included each year as depreciation expense in the cost methodology. Longer depreciation lives lower the amount of depreciation that is factored into the UNE rates.

BellSouth argues that the Commission should adopt the depreciation lives it provided in the 2001 BellSouth Georgia Depreciation Study. BellSouth asserts that those depreciation lives are forward-looking and are consistent with those used for intrastate and external reporting purposes. (BellSouth Post-Hearing Brief, p. 16). BellSouth contrasts its depreciation lives with the FCC-prescribed lives, which it argues are not forward-looking, are too long for technology sensitive accounts and are too old to use as a basis for depreciation rates in this proceeding. Id. According to BellSouth, the rapid changes in technology, which BellSouth must embrace in order to stay competitive, shorten asset lives beyond those prescribed by the FCC. Id. at 17. BellSouth also notes that other state public service commissions have ordered lives shorter than

the FCC-prescribed lives, and that its proposed financial lives are consistent with those used by CLECs operating in Georgia. Id.

AT&T/WorldCom argue that the Commission should adopt the FCC lives that were previously ordered by this Commission in Docket No. 7061-U and which BellSouth was ordered to incorporate into the cost study filing in this docket pursuant to the Third Amended Procedural and Scheduling Order in this docket. (AT&T/WorldCom Post-Hearing Brief, p. 203). According to AT&T/WorldCom, the FCC's forward-looking approach uses the current technological developments and trends, each carrier's most recent retirement patterns and plans, and rarely relies solely on historical data. Countering BellSouth's argument, AT&T/WorldCom assert that the recent trends in depreciation reserve levels in the industry provide empirical evidence that the depreciation lives prescribed by the FCC have been forward-looking. Id. at 206. Further, AT&T/WorldCom stress that more than 20 states have adopted such FCC-prescribed lives, or similar state prescribed lives, for use in TELRIC proceedings. (Tr. 1782). The FCC lives have been adopted recently by public service commissions in Florida, South Carolina, Mississippi, North Carolina, Louisiana and Tennessee. (AT&T/WorldCom Post-Hearing Brief, p. 203).

AT&T/WorldCom also argue that BellSouth's Depreciation Study is flawed for several reasons. First, BellSouth's Depreciation Study relies on financial book lives using Generally Accepted Accounting Procedures ("GAAP") that write off assets in a shorter time than their useful lives. AT&T/WorldCom argue that financial book lives, which are used in financial reports for investors, are not appropriate for use in cost proceedings because they overstate depreciation. Id. at 207. AT&T/WorldCom also state that the FCC rejected the use of financial book lives in the cost model for Universal Service proceedings. Id.

Additionally, AT&T/WorldCom argue that the recent Supreme Court decision in Verizon provides ample support for this Commission to use the lives prescribed by the FCC to set depreciation rates for BellSouth in this proceeding. (AT&T/WorldCom Post-Hearing Brief, p. 210-212). In Verizon, the Supreme Court rejected the argument that TELRIC should not be used to establish the cost for UNEs, and found that the FCC's depreciation and cost of capital rates were reasonable. Verizon, 122 S.Ct. at 1676-78.

Discussion

The Commission adopts the plant lives and depreciation rates as prescribed by the FCC for BellSouth's operations in Georgia. This position is consistent with Commission's conclusions made four years ago in the October 21, 1997, Order in Docket No. 7061-U, which directed BellSouth to use in its TELRIC studies the depreciation methodologies last prescribed by the FCC for Georgia in its cost study.

In this proceeding, BellSouth has presented the same arguments that this Commission rejected in Docket No. 7061-U. Moreover, BellSouth argues, as it did in that docket, that it has the authority to establish its own depreciation rates in Georgia for intrastate purposes. While BellSouth may be free to establish the depreciation rates it finds appropriate for purposes of its accounting and financial reporting, this Commission decides what depreciation rates are appropriate to use for purposes of setting forward-looking UNE rates. The Commission

previously rejected these positions, and BellSouth presented no evidence to convince the Commission to decide otherwise in this proceeding.

The Commission finds the adoption of FCC-prescribed lives, or similar state prescribed lives, in more than 20 states persuasive. The FCC orders and the evidence presented in this case satisfy the Commission that the FCC-prescribed lives and rates are forward-looking and are reasonable for use in the cost studies in this proceeding. In addition, through its interpretation of the FCC's First Report and Order, the Verizon decision establishes that a state commission has discretion to derive the appropriate depreciation rates. Verizon, 122 S.Ct. at 1676. The Supreme Court indicates that the burden is on the incumbents to demonstrate that the "starting point" depreciation rates set forth by the FCC are not adequate. Id. The Commission finds that for the reasons discussed above, BellSouth has not met that burden in this docket.

12. Deaveraging

Positions of the Parties

The FCC requires state commissions to establish different rates for elements in at least three defined geographic areas within the state to reflect geographic cost differences. 47 C.F.R. §51.507(f). On April 4, 2000, the Commission established geographically deaveraged rates for certain UNEs and UNE combinations priced in Docket Nos. 7061-U and 10692-U based upon a stipulation entered into by AT&T, BellSouth, MCI and Sprint on February 21, 2000. However, the stipulation provided that the deaveraged rates would remain in effect only until new rates were established in any future Commission proceeding.

BellSouth argued that the Commission should continue to deaverage rates based upon BellSouth's existing rate group structure. Because geographically deaveraging rates in this manner results in lower rates in urban areas and higher UNE rates in rural areas, BellSouth advocates that the Commission encourage rate rebalancing. (Tr. 30-32). In addition, BellSouth indicated UNE combinations that include the local loop and local channels (up through the DS1 level) and recurring rates for local loops and local channels (up through the DS1 level) should be deaveraged. (Tr. 32). BellSouth contends that loops and local channels above DS1 are developed on a per mile basis and do not need further deaveraging. (Tr. 33). Nor should switching be deaveraged because it does not vary by geographic zone. (Tr. 608). Costs for other UNEs may vary by geographic location, but according to BellSouth, the cost differences are reflected in the rate structure for these UNEs. (Tr. 33).

The geographic deaveraging methodology that BellSouth used aggregated the wire center level costs into zones by separating the wire centers into rate groups based upon BellSouth's General Subscriber Services Tariff ("GSST"). The rate groups were then separated into one of three zones. The wire center cost per line was multiplied by the line count for that element in the wire center. To calculate the average monthly cost for a specific loop or local channel in each zone, BellSouth added the total wire center level costs in the zone and divided by the total line count for that zone. (Tr. 35-36).

AT&T/WorldCom sponsored the stipulated testimony of Gregory J. Darnell. Mr. Darnell testifies that geographic deaveraging of UNE rates should be based upon the forward-looking

economic costs caused by different geographic areas. (Darnell Rebuttal Testimony, p 2). Mr. Darnell also contends that because BellSouth does not use the cost of facilities in each wire center to determine which wire centers are mapped to which geographic cost zones, BellSouth's proposal to map wire centers to retail rate groups violates the FCC Rule 51.503, which "requires that BellSouth's UNE prices be based on forward-looking economic cost." (Darnell Rebuttal Testimony, pp. 5-6). Mr. Darnell testifies that South Carolina is the only state in the southern region to accept BellSouth's deaveraging methodology; all other states that have considered the issue have rejected BellSouth's proposal. Id. at 6-7. Mr. Darnell also testified that the only reason it agreed to the interim Georgia UNE deaveraging stipulation which deaveraged rates based upon rate groups was because it was an interim agreement. Id. at 7. There was no pending cost proceeding scheduled for the near future and the parties reserved the right to challenge the stipulation in any future cost proceedings. Id. at 7-8.

Mr. Darnell argues that the Commission should not continue to use retail rate groups to deaverage wholesale UNE rates. Instead, Mr. Darnell recommends that the Commission adopt the proposal by Sprint to deaverage rates. Id. at 10. Sprint's methodology, as characterized in Mr. Darnell's testimony, provides that the actual cost of providing a UNE anywhere within the state or a geographically defined areas should be no greater than plus or minus 20 percent of the UNEs average price. Id. at 9-10. Mr. Darnell argues that the proper methodology is to rank wire centers from lowest cost per loop to highest cost per loop. The next step is to choose a concrete method to separate the ranking of the wire centers into UNE rate zones. Once this has been done, the total cost for each zone should be divided by the number of loops in the zone to derive an average loop cost for each UNE zone. WorldCom also urges the Commission not to engage in rate rebalancing, but rather to allow the competitive market to regulate rates. Id. at 11-12.

DOD argued that the Commission should reject BellSouth's geographic deaveraging proposal because it does not reflect the relative cost of UNE in various areas of the state. (DOD Closing Brief, p. 25). In addition, DOD argued that BellSouth's proposal was not cost-based and not consistent with the principles of the Federal Act or the guiding principles of this Commission. Id. Instead, DOD recommended that the Commission adopt the geographic deaveraging proposal contained in the stipulation filed with the Commission. The stipulation was based on a plan adopted by the Alabama Public Service Commission. Id. at 25-26.

Discussion

After testimony was filed on this issue, several parties to this proceeding entered into a stipulation on June 17, 2002 regarding geographic deaveraging.[6] That stipulation, which was filed with the Commission on June 17, 2002, provided a three-step methodology to deaverage the recurring costs of unbundled loops below the DS3 level as well as any corresponding sub-loops and loops in combination. Once the wire center costs for the 2-Wire Analog Voice Grade Loop – Service Level 1 (A.1.1) were determined in this proceeding, three (3) zones would be determined based upon the statewide average rate for A.1.1. Zone 1 would consist of wire centers with costs less than 100 percent of the statewide average costs for A.1.1; Zone 2 would consist of wire centers with costs from 100 percent to less than 150 percent of the statewide average costs for A.1.1; and Zone 3 would consist of wire centers greater than 150 percent of the

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[6] Representatives for AT&T, WorldCom, Covad, AccuTel and BellSouth signed the stipulation.

statewide average costs for A.1.1. The total loop-specific costs for those wire centers in Zone 1 would be divided by the total number of loops in the Zone 1 wire centers to determine the Zone 1 rate. The same process would be used for Zone 2 and Zone 3 to develop rates for those zones. This methodology would determine which wire centers would be included in which zones. BellSouth's cost models would use this wire center to zone mapping to determine the deaveraged rates for all other loop types below the DS3 level as well as the corresponding sub-loops and loop combinations based upon the inputs and modeling assumptions established in this docket.

The Staff recommended that the Commission adopt this proposal as set forth in the stipulation. The Commissions finds that the stipulated geographic deaveraging proposal meets the requirement of the FCC's applicable rules and is adopted. The rates attached to this Order in Appendix A are based upon the finding herein.

13. Collocation

Collocation of CLEC facilities in BellSouth's central offices is an important prerequisite to local service and DSL facilities-based competition. Section 251(c)(6) of the Federal Act requires ILECs such as BellSouth to provide physical collocation of equipment necessary for interconnection or access to unbundled network elements "on rates, terms and conditions that are just, reasonable and nondiscriminatory . . ." 47 U.S.C. § 251(c)(6).

Physical collocation is when a CLEC uses space on BellSouth's premises. In physical collocation, the CLEC uses space belonging to BellSouth to place equipment necessary for interconnection or access to unbundled network elements. *See* 47 U.S.C. 251(c)(6). The CLEC owns and is responsible for maintenance and insurance of its collocated equipment. Virtual collocation is also when a CLEC uses space on BellSouth's premises to place equipment necessary for interconnection or access to unbundled network elements. However, in virtual collocation, BellSouth leases the CLEC's equipment for a nominal rate. BellSouth commonly installs the equipment in its equipment line-up and provides all maintenance and repair on the equipment. BellSouth charges the CLEC for that maintenance and repair.

BellSouth has proposed recurring and nonrecurring rates for more than 85 collocation elements for each of the different forms of collocation. BellSouth argues that its cost studies for collocation elements adhere to the TELRIC pricing rules and that they are just, reasonable and nondiscriminatory. (BellSouth Post-Hearing Brief, p. 48). BellSouth asserts that it has provided this Commission with sufficient data upon which to adopt BellSouth's collocation rates. Id. at 49.

AT&T/WorldCom and NewSouth were the only other parties to file testimony and briefs on collocation. These parties took the position that BellSouth's cost studies for collocation elements should be rejected because they do not comply with TELRIC principles and are riddled with historical cost inaccuracies. In particular, NewSouth complains BellSouth has not presented a valid basis for determining the TELRIC cost of providing DC power; therefore the Commission should continue to base BellSouth's DC power charges on the TELRIC cost determined in Docket No. 7061–U. (NewSouth Post-Hearing Brief, p.18).

The Commission recognizes that collocation was the subject of extensive testimony by the parties and is an important prerequisite to facilities-based competition. The primary issues related to collocation are discussed below.

a) DC Power Rates Based on Capacity

Positions of the Parties

BellSouth makes DC power available for a CLEC's physical collocation space at a BellSouth power board or a BellSouth battery distribution fuse bay ("BDFB"). The equipment used by CLECs in collocation facilities often requires the use of substantial levels of DC power. Consequently, costs related to DC power are primary contributors to a CLEC's overhead.

Currently, BellSouth's recurring rates for DC power are based on fused ampere capacity rather than on the amps actually consumed. There are two amp-based loads specified for every piece of equipment – a List 1 and a List 2 Drain. List 1 drain is what the fully functional equipment uses under normal operating conditions according to the manufacturer. List 2 drain is what equipment uses in rare circumstances of power plant distress. Engineers set fuse sizes at 125 percent to 150 percent of the List 2 drain (or maximum expected drain) that a piece of equipment is expected to draw at any given time in order to ensure that the equipment has enough power, but more importantly to prevent power surges from damaging equipment and to prevent malfunctioning equipment from harming the power plant.

Through the Direct Testimony of witness W. Bernard Shell, BellSouth argued that it should be allowed to charge CLECs for DC power based on fused amps (as established by a BellSouth Certified Supplier Engineer) rather than based on actual amps used by the CLEC's equipment (Tr. 730).[7] BellSouth states that charging based on fused amps is consistent with the Commission's order in Docket No. 11901-U, the *MCI-BellSouth Arbitration*. (Tr. 730).[8] BellSouth also argues that CLECs are charged only for the equivalent of List 1 drain or load of the equipment because BellSouth takes the fused amps times .67 to account for a fuse sized at 1.5 the List 1 drain. (Tr. 769).

AT&T/WorldCom argue that the size of a fuse does not correlate to the amount of power a piece of telecommunications equipment uses; therefore the size of the fuse is not an appropriate basis for the rates CLECs pay for DC power. (AT&T/WorldCom Post-Hearing Brief p. 163). DC power rates should based on actual usage because this is how BellSouth incurs cost. Basing the cost of DC power on the fused capacity results in a substantial over recovery for BellSouth. Id. at 164. AT&T/WorldCom recommend metering to capture CLEC power usage. Id. at 166.

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[7] BellSouth contends that its cost to provide one amp is $7.50, but BellSouth only charges $5.00 per fused amp because fuses are sized at 150% of the actual amps used by the equipment.

[8] *In Re: Petition of MCImetro Access Transmission Services, LLC and MCI WorldCom Communications, Inc., for Arbitration of Certain Terms and Conditions of Proposed Agreement with BellSouth Telecommunications, Inc., Concerning Interconnection and Resale Under the Telecommunications Act of 1996*, Docket No. 11901, (Order, dated, March 7, 2001). In that proceeding, this Commission approved fused based pricing because it found that installing and reading power meters to account for actual usage would place an undue burden on BellSouth.

AT&T/WorldCom challenge BellSouth's assertion that charging for only 67 percent of fused capacity accounts for its requirement that fuses be sized at 1.5 times the actual DC power usage. Specifically, AT&T/WorldCom contend that engineers do not size fuses based on List 1 drain, which reflects actual expected power use, but based upon the List 2 drain, which reflects the maximum amps a piece of equipment could, but rarely if ever will, use. (Tr. 1685).

AT&T/WorldCom assert that in Docket No. 11901-U this Commission only rejected the use of meters to determine power usage because of the burden on BellSouth. (AT&T/WorldCom Post-Hearing Brief, p. 166). AT&T/WorldCom also reference the Tennessee Regulatory Authority's ("Authority") recent order in support of usage based rates for DC power. Id.

NewSouth indicated that when a CLEC takes power directly from BellSouth's power board, BellSouth's 225 amp minimum fuse size requirement might be several multiples greater than the CLEC's equipment's actual power requirements. As NewSouth explains, "[i]f NewSouth installs its own BDFB to power equipment that uses 40 amps of DC power, BellSouth will bill it for 225 amps..." (NewSouth Post-Hearing Brief, p. 3). NewSouth also contends that BellSouth has the ability to use meters to determine power usage because BellSouth's engineering guidelines already require metering capability when CLEC's install their own BDFBs. Id. at 9. NewSouth claims that it would be substantially overcharged as a result of basing charges on amps available, rather than used. Id.

Discussion

The Commission agrees with AT&T/WorldCom and NewSouth that usage-based pricing is consistent with TELRIC principles. BellSouth should only charge CLECs for the DC power they actually consume. Although the order in Docket No. 11901-U authorized fused-based pricing for DC power, that holding was based on the evidence before the Commission in that proceeding and on a finding that installing and reading meters would impose an undue burden on BellSouth. The evidence presented in this docket, however, establishes that BellSouth does have the ability to install and read meters. In addition, the Commission notes that after it issued its decision in Docket No. 11901-U, the Authority voted to install meters in Tennessee.

The most sensible solution is to order usage-based pricing, while recognizing the costs BellSouth may incur to install and read meters. The Commission adopts the Staff recommendation to require BellSouth to offer CLECs the option of being billed for power on a load amp basis. BellSouth is ordered to file a supplemental cost study setting forth such costs within 45 days of the date of this Order. CLECs and any other interested party will be allowed fourteen (14) days after that filing to analyze the cost study and file comments addressing the cost study. The rate that this Commission has determined for power based upon per load amp is discussed in Section (b) herein.

b)   Investment per DC Fused and Load Amp

Position of the Parties

BellSouth argues that the methodology it used to develop its proposed investment of $286.00 per fused amp for setting its DC power rate is forward-looking and cost-based. BellSouth witness Mr. Shell testified that BellSouth's proposed investment per DC amp is based on data from 711 actual collocation projects throughout the region. (Tr. 763). Mr. Shell's testimony responds to criticism that BellSouth's methodology was not TELRIC-compliant with the assertion that costs, such as power cabling, that would not apply on a forward-looking basis were backed out. (Tr. 763). BellSouth points out that it has used actual power jobs and actual bills from the vendor, and that the vendor it uses on all power jobs provides the same pricing structure regardless of the type and size of the job. (Tr. 763-64). Mr. Shell testifies that "the reason BellSouth chose to develop a regional number is to ensure that a sufficient number of jobs were used to develop a reliable forward-looking investment per DC amp." (Tr. 766). Furthermore, BellSouth argues that it is entitled to use augments to determine power costs because the *Advanced Services Order* allows an ILEC to recover space preparation and other needed collocation charges on a pro-rata basis. See, *Advanced Services Order*, FCC 99-48, CC Docket 98-147, ¶ 51 (rel. Mar. 31, 1999). BellSouth reasons that the FCC must have determined that such augments were TELRIC-compliant since it allowed ILECs to recover the cost. (Tr. 764).

AT&T/WorldCom assert that BellSouth did not provide a TELRIC-compliant investment cost study for DC power in this proceeding. Specifically, AT&T/WorldCom complain that BellSouth developed this new investment for DC Power exclusively on the basis of power augments for collocators, and not based on the total demand for DC power placed on the power plant for all users. (Tr. p. 1673). Steven Turner, testifying on behalf of AT&T/WorldCom, stated TELRIC principles require that investment for DC power be based on total demand. (Tr. 1673). Mr. Turner testified that augments "do not provide the scale economies in the derivation of the DC power investment that BellSouth benefits from based on its installation of a comprehensive DC power plant." (Tr. 1674).

As was pointed out during NewSouth's cross-examination of Mr. Shell, none of the 711 power augments used by BellSouth to develop the investment per DC amp for Georgia were performed in central offices in Georgia. (Tr. 810). AT&T/WorldCom argue that BellSouth's failure to include Georgia jobs skew results in favor of BellSouth because there are large variances in the average cost per job in each state. (AT&T/WorldCom Post-Hearing Brief, p. 169). AT&T/WorldCom argue that BellSouth excluded Georgia data because the augment jobs in Georgia would have reduced the DC investment amp from the proposed rate to one that would be closer to the current rate. Id.

NewSouth asserts that BellSouth has based its cost study with respect to DC power on the short run costs incurred in augmenting its DC power plant in response to CLEC requests, rather than the long-run cost of providing DC power to all of the equipment in a central office. (NewSouth Post-Hearing Brief, pp. 3-4). NewSouth states that the short run cost analysis is inefficient and contrary to FCC pricing regulations. Id. NewSouth also complains that data inadequacies render

BellSouth's cost study inaccurate in its measure of the inefficient short run costs upon which BellSouth seeks to base its power charges. Id. at 4.

<div align="center">Discussion</div>

TELRIC requires that costs be based on the total demand or total quantity for the element. BellSouth's study, which relies solely on power augments, does not account for possible scale economies that could arise in connection with the installation of a comprehensive DC power plant. The Commission finds that its decision is consistent with the FCC's *Advanced Services Order*. The Commission did not hold BellSouth solely responsible for the costs related to augments; the Commission rejected BellSouth's proposed increase because, in violation of TELRIC principles, BellSouth's study relied solely on power augments.

Particularly troubling is BellSouth's failure to use any Georgia-specific data in setting its rate for Georgia. While BellSouth defended its use of regional data based on use of the same vendor, it was undisputed that there were differences in the average costs per state for augment jobs. (Tr. 811). Because BellSouth has not provided this Commission with reliable data that justifies an increase in the investment per amp, the Commission agrees with the Staff recommendation that that the physical and virtual collocation DC power investment should be the same as ordered in Docket No. 7061-U. In that proceeding, the Commission found that a charge of $165.80 per fused amp was appropriate. Consistent with the Commission's decision to require BellSouth to offer power on a per load amp basis, the Commission adopts the Staff recommendation to use AT&T/WorldCom's proposal of $247.463 per load amp for DC power.

<div align="center">c)   Fiber and Copper Cable Entrance Facilities</div>

<div align="center">Positions of the Parties</div>

BellSouth asserts that its cabling distance is neither discriminatory nor inaccurate. BellSouth witness Mr. Shell responded to the criticism raised by AT&T/WorldCom witness Mr. Turner. Mr. Shell testified that AT&T/WorldCom's recommended approach to estimating cabling distances gives too much weight to its minimum cable length scenario. (Tr. 780). According to BellSouth, AT&T/WorldCom's minimum cable length calculation relies on assumptions of an unlikely, if not impossible, best case scenario. (Tr. 780).

AT&T/WorldCom argues that BellSouth's inclusion of costs for Outside Plant Engineering ("OSPE"), Common Capacity Systems Management and manhole contract labor in its rates for Fiber and Copper Entrance Cable Facilities is improper because the CLEC is required to install the fiber and copper entrance cable. (AT&T/WorldCom Post-Hearing Brief, p. 176). Therefore, AT&T/WorldCom argue that these costs should be removed from BellSouth's Fiber and Copper Cable Installation non-recurring rates for physical and virtual collocation. Id.

AT&T/WorldCom also argue that there is also a double count of the "connect and test" function in the copper entrance cable facilities installation. Id. Mr. Turner testified that it is not necessary to include labor hours in both rate element H.1.57 and rate element H.1.58. (Tr. 1701).

AT&T/WorldCom takes the position that one should be removed. (AT&T/WorldCom Post-Hearing Brief, p. 176).

AT&T/WorldCom argue that BellSouth should have proposed separate rates for entrance cable installation depending on whether splicing is required. Id. Since splicing is usually not required, AT&T/WorldCom contend that BellSouth's proposed rates result in a CLEC being overcharged because BellSouth does not always perform the splicing. Id. at 176-77.

AT&T/WorldCom also assert that BellSouth overstated the average cable length in its fiber and copper entrance cable support structure rates. Specifically, AT&T/WorldCom argue that the average cable lengths used by BellSouth are discriminatory and inaccurate. Id. at 179. According to AT&T/WorldCom, the lengths proposed by BellSouth are consistent with the maximum distances from vital interconnection points within the central office. Id. AT&T/WorldCom propose an alternative approach for developing cabling distances based on the maximum and minimum distances between two points in a central office. (Tr. 1706-07). This approach results in a reduction of the average cable lengths used by BellSouth.

<div align="center">Discussion</div>

The Commission agrees with AT&T/WorldCom's position regarding BellSouth's average cable lengths in fiber and copper entrance cable support structure rates. BellSouth's average lengths reflect the maximum possible distance between interconnection points in a central office, which is inappropriate for use in an efficient, forward-looking TELRIC based determination. Including both maximum and minimum cable lengths in the methodology, as AT&T/WorldCom has done, results in a more accurate estimate of actual costs. Accordingly, the Commission adopts the Staff recommendation to reduce the cable lengths to 210 feet for virtual collocation copper and fiber entrance cable, 200 for physical collocation for entrance cable and 240 feet for physical collocation copper entrance cable.

<div align="center">d)   Cabling Cost</div>

<div align="center">Positions of the Parties</div>

To determine proposed cost for cable racking, BellSouth estimated the cable distances and racking capacity. BellSouth asserts that its cabling distance is not discriminatory. BellSouth criticizes AT&T/WorldCom's recommended approach to estimating cabling distance and complains that AT&T/WorldCom's best case scenario "would be extremely optimistic, more likely impossible." (Tr. 780). Furthermore, BellSouth criticizes AT&T/WorldCom's use of the assembly point arrangement as a comparison to its calculated cable distance. BellSouth asserts that the assembly point arrangement, used as an option for interconnection is not a collocation arrangement, and thus does not provide a valid comparison. (Tr. 780).

AT&T/WorldCom make the point that BellSouth's position on the use of estimates is inconsistent. While BellSouth criticizes AT&T/WorldCom for its use of estimates, BellSouth relies on estimates for cable distances and racking capacity. (AT&T/WorldCom Post-Hearing Brief, p. 179). AT&T/WorldCom state that the difference in the parties' recommendations is not

that one is an estimate and one is not; but rather, that its recommendation reflects forward-looking least-cost rates and BellSouth's does not. Id. AT&T/WorldCom argue that BellSouth's cabling cost appears to be based only on maximum cable distances. AT&T/WorldCom do not suggest that the CLEC cable distances should be the same as BellSouth's, but contend that the distances should not result in the collocator being placed as far away as possible from interconnection points as BellSouth has assumed. Id. AT&T/WorldCom offer an alternative approach which averages best case and worst case scenarios for cabling distances, by incorporating both maximum and minimum cable lengths into its recommendation. (Tr. 1709). AT&T/WorldCom defends its use of the assembly point option for comparison purposes by stating that the distances BellSouth assumes for cabling with the assembly point option are indicative of the distances that should have been used for collocation. (AT&T/WorldCom Post-Hearing Brief, pp.179-80). Accordingly, AT&T/WorldCom recommend that the Commission reject BellSouth's assumptions, which are not based on a forward-looking and nondiscriminatory evaluation of distances between collocators and BellSouth equipment. (Tr. 1712).

Discussion

The Commission agrees that BellSouth's study is not based on a forward-looking and nondiscriminatory evaluation of distances between collocators. Cabled distances should not be estimated based on the collocator being placed as far away as possible from interconnection points. Further, the assembly point option provides a useful comparison. The Commission agrees with the Staff recommendation to modify the physical collocation cable distance to 240 feet for two and four wire cross-connect (assembly point collocation option), 180 feet for all fiber cross-connects and 180 feet for all cross connects for virtual collocation.

e) POT Frame Utilization Rates

Positions of the Parties

BellSouth used a fill factor for Point of Termination frames in its collocation cost study that was less than half of the fill factor it used for all other frame equipment. BellSouth witness Mr. Shell testified that the POT frame termination should continue to be subject to different fill factors because BellSouth no longer requires CLECs to use POT frames. (Tr. 783). BellSouth only assesses POT frame charges to CLECs that continue to have POT frames under old agreements that pre-dated this change. (Tr. 783).

AT&T/WorldCom argue that BellSouth should apply the fill factor used for all other terminal equipment to POT frames. (Tr. 1715). According to AT&T/WorldCom witness Mr. Turner, BellSouth is responsible for engineering the POT frame and can therefore engineer it so that it is as efficient as the other frame equipment that BellSouth uses. (Tr. 1715). Mr. Turner asserts that BellSouth should be required to utilize a fill factor that is consistent with the engineering it applies to its terminal frames within its central office. (Tr. 1715-16). Thus, AT&T/WorldCom propose that BellSouth bring all termination frames under a single fill factor consistent with the percentage it uses for all other terminal equipment to POT frames. (Tr. 1716).

Discussion

The Commission agrees with AT&T/WorldCom's conclusion. The mere fact that BellSouth no longer requires CLECs to use the POT frame should not result in a different fill factor. The Commission adopts the Staff's recommendation to apply a single fill factor that is the same as BellSouth uses for all other frame equipment.

f) Application Costs

Positions of the Parties

BellSouth charges a CLEC an application fee each time the CLEC requests collocation space. BellSouth defends this practice with the argument that it takes more time to complete the necessary functions on a subsequent application than on the initial application. (Tr. 774). This additional time is the result of new agreements or amendments to the agreements that have been enacted since the initial collocation was established. (Tr. 774). BellSouth responds to AT&T/WorldCom's criticism concerning the time shown for the Outside Plant Engineering with the argument that the average time shown for the OSPE was the 30 minutes included in BellSouth's study. (Tr. 775). BellSouth admits that the level of Parsons Engineering is less for subsequent applications, but states that the fee charged to it is a based on an average for both the initial and subsequent applications. (Tr. 775).

As discussed in part above, AT&T/WorldCom raised several issues with BellSouth's application charges. The problems relate to AT&T/WorldCom's position that the rate for a subsequent collocation application should be significantly less than the cost for an initial application. BellSouth's proposed rate for a subsequent application is only $250.00 less than the costs for the initial application. AT&T/WorldCom point to three problems with BellSouth's proposed cost structure. First, the Job 58 function, which is performed by the Account Team Collocation Coordinator, shows 6.5 hours for an initial application and 7.5 hours for subsequent applications. AT&T/WorldCom does not believe that the increased time related to subsequent applications is justified. (Tr. 1696-97). AT&T/WorldCom cites the lack of detail in BellSouth's explanation of the activities for a subsequent application for support. (Tr. 1697).

Second, AT&T/WorldCom assert that there is virtually never any OSPE involved in a subsequent application. (Tr. 1697). Third, AT&T/WorldCom assert that the level of Parsons Engineering should not be the same in initial and subsequent applications. AT&T/WorldCom contend that the level of engineering would almost always be significantly less for a subsequent application and that BellSouth has provided no information substantiating its levels of Parsons Engineering. (Tr. 1697-98).

Discussion

The Commission agrees with AT&T/WorldCom that BellSouth has overstated the cost of subsequent applications for collocation space. BellSouth has not provided sufficient evidence to justify increasing the hours of the ATCC for subsequent applications. The evidence supports that BellSouth provided greater detail on the activities for the initial application than the

subsequent ones. (Tr. 1697). This lack of detail for subsequent applications is not justified since BellSouth claims that more time is necessary for subsequent applications. The Commission adopts the Staff recommendation to use the 6.5 hours for the ATCC to review of both an initial and subsequent collocation application. The 6.5 hours for an initial application is consistent with BellSouth's testimony. That a subsequent application could demand equal review time was within the range of reasonableness contemplated by AT&T/WorldCom's witness, Mr. Turner. (Tr. 1697).

BellSouth's explanation that the Parsons Engineering fee is based on an average between initial and subsequent applications is sensible. No part of the reduction to BellSouth's proposed rate for subsequent applications pertained to this particular critique by AT&T/WorldCom of BellSouth's proposal. BellSouth simply did not demonstrate that subsequent applications cost more than the initial applications.

g)   Space Availability Report/Cage Preparation/Security Access Cards

Positions of the Parties

A Space Availability Report is an inventory of available space. When a CLEC submits a collocation request, BellSouth charges the CLEC to recover its cost of providing a Space Availability Report. The dispute between the parties on this issue relates to the amount of time it takes BellSouth to develop these reports. More specifically, the parties disagree on what benchmarks should be relied upon in deriving a reasonable work time.

BellSouth emphasizes that it is entitled to recover its costs. Since it doesn't know what assumptions other companies make in developing their charges, BellSouth focuses its testimony on its approach. BellSouth developed the costs of providing Space Availability Reports by determining work groups involved and the amount of time they would require to produce a report. (Tr. 776). BellSouth then multiplied the work time by the appropriate labor rate and cost factors. (Tr. 776). BellSouth justifies its proposed Space Availability Report rate by comparing it to rates approved by other state commissions in the BellSouth region. (Tr.776).

AT&T/WorldCom raise several arguments for why BellSouth's Space Availability Report charge should be reduced. First, BellSouth's proposed non-recurring charge for a Space Availability Report in this proceeding is more than double the rate in the Northeast region and more than eight times the rate in the Midwest region. (AT&T/WorldCom Post-Hearing Brief, p. 177). Furthermore, if two CLECs request a report on the same day, both CLECs end up paying $1,958, even though BellSouth only performs this function once. Id.

AT&T/WorldCom also assert that several of the inputs used by BellSouth are improper or overstated. AT&T/WorldCom recommends that BellSouth's inputs for the Common Systems Capacity Management Function be reduced and that any inputs other than those for the ATCC be eliminated. (Tr. 1700).

Discussion

The Commission agrees with AT&T/WorldCom that BellSouth's costs are overstated. BellSouth did not explain adequately why its costs for space availability reports were so much higher than other regions of the country. While it may be conceivable for minor differences to exist, it is not readily understandable why such a substantial disparity should exist between companies for this particular issue. This disparity, coupled with the evidence that BellSouth's proposal would allow it to charge CLECs separately for work it only had to perform once, supports the conclusion that BellSouth's proposed costs are overstated. That said, the Commission does not accept all of the recommendations made by AT&T/WorldCom on this issue. The Commission adopts the Staff recommendation to make the following modification to BellSouth's cost study, which provides that BellSouth shall reduce the engineering hours to 3.0 for Common Systems Capacity Management (CSCM) and to 4.0 for the Corporate Real Estate and Support (CRES) for physical collocation space availability reports per central office.

15.   Switching

Positions of the Parties

A switch interconnects lines and trunks. BellSouth uses a two-stage process to develop its switching material prices. First, BellSouth develops fundamental studies to identify material prices for basic switching functions. Second, BellSouth identifies which switching function each network element or retail service uses and the material prices unique to that element or service. (Tr. 551). BellSouth uses several models in this proceeding to develop switching rates that were not used in Docket Nos. 7061-U or 10692-U. First, BellSouth uses the Switching Cost Information System/Model Office (SCIS/MO) to determine its fundamental switch investments. (Tr.551). BellSouth uses SCIS/MO to calculate the costs incurred for purchasing the switches in the Georgia network. Next, the output of the switch investments from SCIS/MO is used as inputs to another new model BellSouth recently developed – the Simplified Switching Tool ("SST"). (Tr. 554). These outputs are allocated to either the "port" (flat rate) or the "minute of use" category. (Tr. 554). The SST-P develops the port costs, and the SST-U[9] develops the minute of use and composite feature costs. The outputs from the SST-P and SST-U are then used as inputs to the BellSouth Cost Calculator ("BSCC") to develop the monthly recurring switching rates. (Tr. 554).

Because the SCIS/MO uses a "bottoms-up approach" to determine the material prices for the switches used in the cost study, one of the important inputs to SCIS/MO is the discount off the list price BellSouth receives from switch vendors. (Tr. 739-41). When BellSouth buys a new switch to serve a new community or replace an older switch, BellSouth receives a two-tiered discount structure from the manufacturer: a "new" discount for new equipment and a lower "growth" discount for equipment purchased as growth or upgrades to the existing switch. (BellSouth Post-Hearing Brief, p. 26). In the cost study, BellSouth applied the new discount it calculated to the equipment that would be for a new switch and a "meld" of the new and growth discount it calculated to equipment that could be purchased for either a new switch or as growth discount. Id. at 26-27. BellSouth based its meld of new and growth discounts on "real-world"

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[9] The "P" stands for port , and the "U" stands for usage.

numbers by incorporating actual replacement and new switch orders. Id. at 27. In developing the switching investment associated with switching costs, BellSouth used its manufacturer billing data for switch material from its internal databases to determine the actual material price it paid for the switches. Id.

BellSouth claims that precedent is on its side on this issue. It argues that this Commission has previously rejected in Docket Nos. 7061-U and 10692-U the position advanced in this proceeding by AT&T/WorldCom witness, Catherine Pitts, that melding of new and growth discounts is inappropriate. BellSouth also cites to the FCC's decision approving Verizon's application for in-region interLATA authority in New York to support its position that the melding of new and growth discounts does not violate TELRIC.[10] Id. at 28. In AT&T Corp. v. FCC, 220 F.3d 607 (2000), the United States Court of Appeals for the District of Columbia Circuit affirmed the FCC decision. In addition, BellSouth raises the policy argument that to adopt AT&T/WorldCom's method of using the switch contracts to determine the applicable discount requires "mathematical gyrations" because switch contracts are very complex and require the use of assumptions to arrive at an estimated discount. Id. at 29.

BellSouth disagrees with AT&T/WorldCom regarding the allocation of the equivalent POTS half calls ("EPHC") investment and getting started costs. According to BellSouth, these costs are driven by usage volumes and should be assigned to the minute of use and features costs. This assignment is appropriate because EPHC is based upon the real time capacity of the switching module processor and SCIS/MO outputs the "getting started" investments in terms of dollars per millisecond, not dollars per line. The vendor documentation supports allocating these costs to the minute of use and feature costs. (Tr. 744-45).

BellSouth contends that the "feature per port" costs developed by the SST-U model and the feature specific hardware study are appropriate. The new SST-U model is more open for public inspection and simpler than the SCIS/IN model.[11] (Tr. 750). In order to determine the composite feature rate, BellSouth assessed the average busy hour usage for a feature, which switch resources the feature used and the number of features an average customer would use. The average busy hour demand was multiplied by the number of features used by the average user to determine the average busy hour feature calls per line. (Tr. 750). This information and the results of a feature hardware cost study were used as inputs into the SST-U model to determine the UNE material price for features. (Tr. 751). Although SCIS/IN uses thousands of individual processor times, BellSouth maintains that its use of the same processor time for the 56 features is reasonable considering it examined the individual processor times. The assumption that each feature uses approximately the same amount of processor time is reasonable because BellSouth is developing an average cost study. (Tr. 756). BellSouth contends that the projected average feature busy hour calls is reasonable because it only applies to subscribers that use features, not to every busy hour call across all lines. (Tr. 756). BellSouth also argues that the SST-U model accounts for how Lucent and Nortel switches process feature calls. (Tr. 756).

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[10] The citation for the FCC decision is 16 FCC Rcd. 3953, 4085.

[11] Switching Cost Information System – Intelligent Network ("SCIS/IN") was the model BellSouth previously used in conjunction with SCIS/MO to determine feature costs.

AT&T/WorldCom argue that the switch discount inputs BellSouth has used in the cost study to develop switching costs significantly overstate switch costs and skew UNE switch rates. (AT&T/WorldCom Post-Hearing Brief, p. 144). The switch discount for input into the SCIS/MO should be computed based on BellSouth's contracts, rather than the "sample" of billing data. BellSouth's use of a small "sample" has resulted in a discount that is less than if all of its switch contracts were incorporated. Id. at 145-47. In addition, AT&T/WorldCom argue that TELRIC requires the use of a new discount, and that BellSouth's melded discount does not comply with TELRIC. Id. at p. 149. The meld does not replicate the prices that would exist in a competitive market. Id. at 149-50. AT&T/WorldCom state that given the FCC's decision in Vermont[12] the Commission has the authority to approve switch rates based upon a 100 percent new switch discount. Id. at 151.

AT&T/WorldCom offer an alternative to its primary recommendation should the Commission determine that a melded discount should be used. AT&T/WorldCom claim that BellSouth's calculation of its melded discount is flawed. First, the methodology employed for determining its new discount for the melded discount is inconsistent with the new discount established in the switch contracts. Id. at 152. Second, the discount assumes too much of the lower growth discount than what should be applied in a forward-looking cost study. Id. AT&T/WorldCom proposed an alternative discount for use in the cost study based on the assumption that all new switches are purchased to serve current demand and that the higher growth equipment is purchased to serve forecasted growth over the life of the switch. Id. at 152-53.

Ms. Pitts testified that the "getting started" cost of a switch (those costs associated with the central processor, maintenance, administrative, test, and spare equipment, memory and other common equipment in the switch) and EPHC costs should be assigned to the port element rate rather than the minute of use and feature rate elements. (Tr. 1561, 1565). These costs are non-traffic sensitive and should be recovered via non-traffic sensitive switch rate elements. (Tr. 1562).

AT&T/WorldCom charges that BellSouth's tandem switch costs are overstated and need to be reduced. (AT&T/WorldCom Post-Hearing Brief, p. 153). The Commission should also set the feature rate at zero because the composite feature cost study BellSouth relies upon is fatally flawed, all of the additional costs unique to features are recovered in other switch rate elements and this Commission has twice previously rejected a separate charge for vertical features. Id. at 160-162.

<u>Discussion</u>

With the exception of vertical features, the Staff did not recommend any changes to the switching rates BellSouth filed in this docket. The Staff recommended that the Commission order that there shall be no additional, separate charge for features. The Commission adopts the Staff's recommendations. The decision that there shall be no additional, separate charge for

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[12] VCC Memorandum Opinion and Order, In the Matter of Application by Verizon New England Inc., Bell Atlantic Communications, Inc. (d/b/a/ Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions), Verizon Global Networks Inc., and Verizon Select Services Inc., for Authorization to Provide In-Region, InterLATA Services in Vermont, CC Docket 02-7, FCC 02-118 (Rel. April 17, 2002) ¶¶33 and 34.

features is consistent with the Commission's prior orders finding that the costs for vertical features is embedded within the unbundled switch port element.

BellSouth's melding of new and growth discounts is reasonable. The FCC has found that it is within the state's discretion to determine that it may not be cost-effective to acquire all of the projected need at the outset. *GA/LA 271 Order*, ¶ 82. In reaching this determination, the FCC noted that AT&T did not present sufficient evidence that any volume discounts for discounts must be based on the assumption that they are all newly purchased. Id. No party in this proceeding presented sufficient evidence for the Commission to reach this determination.

16. Daily Usage Files ("DUF")

Positions of the Parties

BellSouth provides DUF to CLECs who use these files to bill their end user customers. In addition, CLECs use DUF files generally to track the usage of UNEs such as switching. BellSouth provides CLECs with three types of DUF files. ODUF or Optional Daily Usage Feed files track local calls made by CLEC customers who are served via the UNE-Platform ("UNE-P"). ADUF or Access Daily Usage Feed files track calls when CLECs need information for access or reciprocal compensation billing for an originating or terminating toll or local call via a UNE-P switch port. Finally, EODUF or Enhanced Optional Daily Usage Feed files are provided to CLECs who resell BellSouth's wholesale service.

AT&T/WorldCom raised enough problems that it had with BellSouth's DUF cost study that for this item it makes more sense to present together the parties' position on each issue. Mr. Turner testified that his primary problem with BellSouth's DUF cost study is that BellSouth developed DUF costs without considering BellSouth messages that are processed by BellSouth Billing Inc. (BBI), an organization that also processes CLEC messages. (Tr. 1722). BellSouth responds that its cost study accurately reflects the appropriate mix of message types. (Tr. 664). AT&T/WorldCom argue that BellSouth used inflated labor rates in the DUF cost study. (Tr. 1724). BellSouth states that the labor rates in the cost study are pursuant to its vendor contract. The inflation rates are not associated with the labor inflation Telephone Plant Index BellSouth uses for its own labor. (Tr. 669).

AT&T/WorldCom also criticize BellSouth's DUF cost study for attempting to recover system development expense on an annual basis instead of capitalizing the expense. (Tr. 1723-24). BellSouth argues that it is appropriate not to capitalize the nonrecurring billing system development labor costs because they reflect activities that are not actual programming. (Tr. 668). AT&T/WorldCom also charge that the different cost recovery periods BellSouth employed for DUF messages are arbitrary and not cost-based. (Tr. 1723). BellSouth states that the recovery periods are tied to the number of years data BellSouth used to develop the average investment for each category of DUF. (Tr. 667). AT&T/WorldCom's next criticism is that BellSouth included costs for DUF messages received by an electronic tape even if the CLECs receive messages via an electronic feed. (Tr. 1724). BellSouth states that these costs are nonrecurring developmental costs associated with the initial production of a magnetic tape. (Tr. 670). AT&T/WorldCom also charge that BellSouth understates CLEC DUF messages. (Tr.

1725). BellSouth responded that it BellSouth appropriately used the latest data available for the cost study. (Tr. 670-72). Finally, AT&T/WorldCom contend that the Optional Daily Usage File: Recording Per Message rate element recovers switching investments that are already recovered in the switching rates. (Tr. 1725). BellSouth states that the charge in question only applies to CLECs that use their own switch, but order BellSouth Operator Services to provide directory assistance capabilities. (Tr. 672).

<div align="center">Discussion</div>

The Commission finds that BellSouth's forecasted incremental growth in monthly and annual ADUF, ODUF and EODUF messages is well below what the actual data for 2001 established. The Staff made several modifications to BellSouth's forecasted amount. First, the Staff recommended increasing the monthly ADUF, ODUF and EODUF messages processed by the BBI for the period 2001 through 2003. By incorporating 2001 data into the study, the growth rate for ODUF and EODUF messages should be 6,000,000 per month for 2001, 4,000,000 per month for 2002, and 3,000,000 per month for 2003. For ADUF, the Staff recommended increasing the monthly growth rate to 8,000,000 messages per month in 2001, 7,000,000 messages per month in 2002, 4,000,000 messages per month for 2003, 2,000,000 messages per month for 2004 and 1,000,000 messages per month for the period 2005-2011. The Staff also recommended increasing the annual ADUF messages for 2001 to 2,199,511,788, to 2,973,511,788 for 2003 and to 3,393511,788 for 2004. Over the ADUF study period, Staff's recommendation increases the total number of ADUF messages by 81.6 percent over that used by BellSouth in its filing. For the ODUF annual messages, the Staff recommended 2,039,104,632 for 2002, to 2,537,032,6232 for 2003 and to 2,812,960,632 for 2004. Over the ODUF study period, the Staff recommendation increases the total number of ODUF messages by 40.2 percent over that used by BellSouth in its filing.

AT&T/WorldCom argued that BellSouth assumed a growth rate during the study period for new CLECs purchasing DUF files that did not correspond to the significant reduction in new CLECs actually entering the local telecommunications market. The Commission agrees. By artificially inflating the number of new CLECs in the market, BellSouth has overstated the support labor hours and development costs needed. Therefore, the Commission adopts the Staff recommendation to modify BellSouth's cost study for monthly incremental CLEC's purchasing ADUF to seven (7) for 2003 and 2004, six (6) for 2005 and 2006, five (5) for 2007 and 2008, four (4) for 2009 and 2010 and three (3) for 2011. For ODUF, the monthly incremental CLECs purchasing ODUF was changed to nine (9) for 2001, eight (8) for 2002, seven (7) for 2003 and four (4) for 2004.

The Staff also recommended eliminating the system resource cost for system developers to print paper to fix computer programming problems. BellSouth's cost study assumed an unreasonable amount of paper that a consultant would have to print to trace a system coding problem. The Commission agrees with AT&T/WorldCom and finds that today's technology allows a system developer to use his/her computer to complete DUF system development without the need for a huge amount of paper. Therefore, the Commission adopts the Staff recommendation to remove this cost from the ODUF cost study.

Last, the Staff recommended eliminating the costs for "Test Tape Per New OCN Receiving Tape" in the ODUF cost study. BellSouth has two alternatives for CLECs to receive DUF messages; CLECs can receive messages electronically or on a magnetic tape. The charge for messages received electronically is on a per message basis and the charge for the magnetic tape is on a per tape basis. However, BellSouth included the costs for providing the magnetic tape feed in the costs for processing messages generally. BellSouth provided testimony that the costs "may appear to more appropriately belong with element M.2.3, the per Magnetic Tape Provisioned element." (Tr. 670). The Commission agrees with the Staff's recommendation to eliminate these costs from the ODUF cost study. CLECs who only receive DUF messages electronically should not also have to pay for the magnetic tape development costs. Therefore, the Commission adopts the Staff's recommendation on this issue.

17.   Non-Recurring Charges ("NRCs")

Positions of the Parties

Non-recurring charges are the one-time costs for activities required by BellSouth to initiate or provide unbundled network elements that are necessary for establishing, disconnecting or rearranging telecommunications service for a CLEC customer. BellSouth developed the non-recurring cost study in this proceeding by looking at the time it takes for each discrete activity involved in completing a CLEC order from start to finish. That is, BellSouth looked at the time between the receipt of the request to provide service to the CLEC customer and when the customer's service is installed. Next, BellSouth proposed a cost for each of the tasks and work times that were identified.

On October 1, 2001, BellSouth filed a non-recurring cost study and a "Georgia Work Time Study" to support some of the non-recurring rates. According to BellSouth, due to time constraints, the Georgia Work Time Study was a substitute for the time and motion study that the Commission ordered in Docket No. 11900-U for xDSL non-recurring rates. (Tr. 558). However, the Georgia Work Time Study was used to support non-recurring costs for additional UNEs other than those specified by the Commission order in Docket No. 11900-U. As a result, on January 2, 2002, the Commission required BellSouth to re-file the non-recurring cost study using forward-looking labor and task times. On January 18, 2002, BellSouth re-filed its non-recurring cost study.

BellSouth's case on nonrecurring costs consisted of a defense of its methodology, a general rebuttal to the CLECs' recommendations as a whole and specific rebuttals to issues raised by CLECs. BellSouth argues that the "Georgia Work Time" Study was properly designed and executed. Work sampling was used because the resource and time constraints made it too burdensome to complete a "true time and motion study." (Tr. 558). Although the two-week time period for the work sampling was less than ideal, the methods employed by BellSouth in the "Georgia Work Time" study were based on well-established techniques and the study is a reasonable representation of BellSouth's work process. (David B. Laney Surrebuttal Testimony, pp. 3-4). BellSouth witness David B. Laney took issue with the criticisms by AT&T/WorldCom concerning data substitutions because the post-study data substitutions he observed favored CLECs. Id. at 4-5. Mr. Laney testified that the criticisms of AT&T/WorldCom witness, Mr.

Turner, stemmed from Mr. Turner's confusion over work sampling. Id. at 6. BellSouth recommends that the Commission reject AT&T/WorldCom's recommendation to rely upon subjective judgments as an alternative to relying upon data collected during the "Georgia Work Time" study. Id. at 9.

BellSouth contends that it has used the appropriate task times and other inputs to calculate the non-recurring rates proposed in this proceeding. (BellSouth Post-Hearing Brief, p. 41). Subject Matter Experts ("SME") for each of the work centers/groups involved in providing UNEs to CLECs took into account efficient practices in a forward-looking environment along with their personal experiences to provide the work times for the tasks required to provision UNEs to CLECs. Consistent with the Commission's previous order in Docket No. 11900-U, BellSouth conducted a work sampling and self-reporting time and motion study to examine work activities associated with xDSL loops and related UNEs. Id. at 42. BellSouth also had SMEs determine if the results from the work sampling and self-reporting time and motion study were consistent with forward-looking tasks times. Id. In some cases, the SME used the "Georgia Work Time" study merely as a data point in developing the forward-looking task time estimates and in other cases the SME determined that the "Georgia Work Time" study results were consistent with forward-looking estimates Id. at 42-43.

BellSouth argues that the testimony of its experts should carry more weight with the Commission because they have more experience and familiarity with the subject matter. (BellSouth Post-Hearing Brief, pp. 42-43). The difference in experience accounts for the difference in recommendations. BellSouth states that the CLECs' proposed non-recurring rates are based on unrealistic assumptions about "automated processes or systems that do not exist." Id. at 45. Another difference between the parties concerns whether the costs for certain work activities are recovered in recurring rates. BellSouth states that this difference results from the CLECs' failure to recognize the difference between capitalized labor and nonrecurring labor expense. Id. at 46. BellSouth contends that non-recurring rates in other states do not provide a useful comparison because the UNEs being compared are not always the same and the UNE rate structures offered by other incumbents are substantially different. Id. at 47. BellSouth claims that the unrealistic assumptions relied upon by CLECs do not account for the real costs of the work activities associated with ordering and provisioning UNEs. Id. 47-48.

BellSouth responded to criticisms made by Covad's witnesses concerning the Address and Facility Inventory Group ("AFIG"). "The AFIG is responsible for data base inventory and assignment of basic central office and outside plant facilities to service orders" as well as "for maintenance of street address records, and for processing engineering work orders to the assignment data bases that add and rearrange outside plant facilities." (Tr. 439). For line sharing, AFIG processes Request for Manual Assistance ("RMA") when fallout occurs due the CLEC's failure to pre-qualify the loop or when the submitted Facility Reservation Number ("FRN") is incorrect. Essentially, BellSouth states that the AFIG's involvement in line-sharing provisions is only one (1) minute and should not be an issue. (Tr. 439). Circuit Capacity Management ("CCM") plans and initiates the timing and sizing for interoffice facilities and equipment additions and removals. Common Systems Capacity Management ("CSCM") plans and initiates the timing and sizing of "common type" facilities and equipment in central offices BellSouth argues that although the work times for the CCM and CSCM should be reduced,

Covad is incorrect in its assertion that the work times for these centers are unnecessary for installation of a line splitter. (Tr. 441-42).

BellSouth contends, contrary to assertions by Covad, that the Complex Resale Support Group ("CRSG") is neither unnecessary nor duplicative. According to BellSouth, CRSG is the quality control point to ensure that line splitter orders are accurate and handled promptly. (Tr. 441). Review of a Line Splitter System Ordering Document ("LSOD") is done at different stages in the order process flow and there is no duplication by BellSouth's work groups in reviewing this information. The work functions by CRSG, including disconnecting line splitters, are critical to the line splitter process. (Tr. 441).

The COSMOS/Switch Group is part of the Facility Assignment Control System ("FACS") provisioning group for service order processing. (Tr. 444). The disagreement between BellSouth and Covad on the COSMOS/Switch Group relates to whether this function is already accounted for in the "installed investment in BellSouth's recurring costs. BellSouth states that it is not accounted for because while the CLEC is not required to activate its cable and pair assignment at the time of splitter installation, when the CLEC does make this request, the COSMOS/Switch Group must verify the correct format, ensure that the request is not a duplicate request, check the frame identification and location and input this information into the database. (Tr. 444). BellSouth is not aware of any future enhancements that would eliminate the need for the COSMOS/Switch group to manually check the database before placing the line sharing activation order. (Tr. 445). In addition, BellSouth and Covad disagree as to whether the time BellSouth has included for the COSMOS/Switch Group to process an RMA is reasonable. In short, BellSouth argues that there are numerous reasons for an RMA, no system enhancements that would eliminate the need for RMAs. (Tr. 445-46).

BellSouth next responds to AT&T/WorldCom's criticisms of its proposed costs related to the Local Carrier Service Center ("LCSC"). The LCSC is not overstaffed as AT&T/WorldCom contends. The LCSC is a regional center that processes Local Service Requests ("LSRs") for numerous products. BellSouth argues that the blank tally sheets for employees that were included in the "Georgia Work Time" study were not reflective of work performed by the LCSC because the majority of the work performed by the center – UNE-P and resale orders – was not a part of the study. (Tr. 447). BellSouth disputes the recommendation by AT&T/WorldCom that five (5) minutes is a reasonable amount of time for the LSCS to handle UNE loop and UNE-P orders. This estimate does not account for the amount of work required by the LCSC for some of the more time consuming orders that fall out for manual processing. (Tr. 448). Finally, BellSouth argues that the fallout rate calculated by AT&T/WorldCom's witness looked at a small sample and was based on a misunderstanding of how sampling works. (Tr. 449).

BellSouth developed Customer Wholesale Interconnection Network Service Center ("CWINS") data using average work time information for instances in which the function being analyzed did not vary by loop type. BellSouth disagrees with the criticism that such a methodology is arbitrary. (Tr. 450). AT&T/WorldCom and BellSouth also disagree over the appropriate use of Florida cost information for developing costs in this proceeding. First, BellSouth argues that some CWINS times are less for Georgia than for Florida. (Tr. 45-51). Second, BellSouth urges this Commission not to apply probabilities from the Georgia work time study to work times from

the Florida cost study. BellSouth argues that this method advocated by AT&T/WorldCom artificially reduces CWINS work times. (Tr. 451). CWINS also has to perform manual work whenever Local Number Portability ("LNP") is involved with an order. (Tr. 451). BellSouth also responds to AT&T/WorldCom's proposed correction to the dispatch probability. BellSouth claims that the work sampling data cannot be used to calculate a dispatch probability because the CWINS is not a dispatch center. (Tr. 452).

BellSouth argues that Covad's assertions regarding duplicative tasks for CWINS are incorrect. The frame continuity date and the due date are not the same dates. Testing is done on each date, but it is different testing. (Tr. 455). Furthermore, BellSouth argues that the adjustments by Covad to the CWINS work times for the unbundled copper loop – non-designed, the ADSL compatible loop, the ISDN-IDSL capable loop and loop testing assume an automated process that does not exist. (Tr. 456-57). In addition, the CWINS tasks for an SL1 loop cannot be compared to an xDSL loop because an SL1 loop is a non-designed loop and an ADSL-compatible loop is a designed loop that has additional features such as loop testing. BellSouth also argues that an unbundled cooper loop – non-design ("UCL-ND") is a non-designed loop and does not contain time for CWINS to perform additional testing that is performed on a designed loop. (Tr. 458-59).

According to BellSouth, AT&T/WorldCom erred in its reliance upon the year 2000 Florida cost study to eliminate work times for the Service Advocacy Center ("SAC") that was included in the non-recurring cost study in this proceeding. The SAC has assumed additional work activities since the 2000 Florida cost study. BellSouth also recommends that the Commission reject AT&T/WorldCom's modifications to the SAC task time probabilities derived from the "Georgia Work Time" sampling data. AT&T/WorldCom witness, Mr. Turner did not understand how the study was performed and is inconsistent with Mr. Turner's criticism of BellSouth's work sampling effort. (Tr. 461).

Covad's adjustment to SAC work times for xDSL capable loops should be rejected because there are technical differences between analog loops and xDSL capable loops. It is the work activities for a UCL-ND and SL1 loop that should be compared to each other because the work times and activities are the same. (Tr. 461-62). BellSouth disputes Covad's contention that the SAC work times for an IDSL-capable loop are inflated. The higher work times result from the differences in the technical parameters and provisioning process between voice grade loops and IDSL-capable loops. (Tr. 462).

Covad and BellSouth disagree over whether the tasks for SAC, specifically those associated with "field assist" and "field assist service order monitoring," are duplicative. BellSouth explains that its collective bargaining agreement with the Communication Workers of America requires various tasks associated with field assistance to be performed by varying levels of personnel. Each task is necessary to ensure that service is provided on the due date. (Tr. 464). BellSouth also disagrees with Covad's criticisms of the work times associated with a variety of activities. First, BellSouth defends its work times for UCL-ND by stating that the tasks performed by the SAC for the UCL-ND are the same as those for voice grade loops. With respect to ADSL-capable and IDSL-capable loops, BellSouth states that work is required by SAC to check loop parameters to ensure that the requested service will function on the loop. Finally, BellSouth

states that SAC involvement with loop conditioning is time intensive and a prerequisite for loop conditioning, and Covad does not support its allegation that the proposed work time is unreasonable. (Tr. 465-66).

BellSouth's Installation & Maintenance/Special Services Installation & Maintenance ("I&M/SSI&M") technicians are responsible for repair, installation, rearrangement or removal of telephone services in the outside plant. I&M is responsible for non-designed, POTS and ADSL products and SSI&M is responsible for designed or special services. (Tr. 366). The issue concerning I&M/SSI&M work times boils down to whether the work required for DSL-capable loops is the same as what is required for an analog loop. BellSouth claims that the times required for each are different. BellSouth argues that its proposed work times are based on actual data and are more accurate than Covad's proposals, which were based on assumptions and estimates. (Tr. 372).

The Central Office Field Work Group ("COFWG" or "CO") is responsible for testing, adjusting and/or repairing central office equipment and facilities used in providing network switching, trunking and special services. The technicians perform installation and maintenance tasks on switching, trunking, and special services circuits and perform routine central office equipment maintenance. (Tr.374-75). BellSouth and AT&T/WorldCom differ as to how much work the central office technicians perform. BellSouth cites to two complicating factors that it believes AT&T/WorldCom did not properly account for in their recommendation. First, the "loop appearance" and the "collocation appearance" are not located on the same distributing frame. Second, AT&T/WorldCom did not consider that the COFWG technicians perform testing and coordination functionality on designed circuits. (Tr. 375). BellSouth relies on the personal experience of its witness to defend the times included in its cost studies for installing and removing jumpers. Further, BellSouth states that it is reasonable to use different work times for installing and removing a jumper since the functions involved are different. (Tr. 376). Finally, BellSouth and AT&T/WorldCom differ as to whether the technicians perform any testing beyond continuity testing. BellSouth argues that central office technicians perform much more than just continuity testing and that this additional testing cannot reasonably be accomplished in the two minutes recommended by AT&T/WorldCom. (Tr. 377).

BellSouth argues that Covad's criticisms of the CO work times in the Line Sharing cost study do not make sense because they are based upon assumptions of a splitter arrangement that BellSouth does not use and will not use in the future. (Tr. 379). In addition, Covad has made several incorrect assumptions about the line sharing arrangement that result in incorrect assumptions about the work times for the CO. (Tr. 379). BellSouth dismisses Covad's recommendation to eliminate CO work times from the ADL-compatible and IDSL-compatible cost studies stating that the Covad underestimates the amount of time and effort associated with designed circuits. (Tr. 381).

BellSouth states that the flaw in AT&T/WorldCom's recommendations regarding a fallout rate is that it fails to recognize the difference between fall out in the ordering process and fall out in the provisioning process. The cost study, consistent with the FCC's decision in the Second Louisiana Order, treats each type of fallout differently. Fallout percentages for LSR's are in the ordering process. Fallout in the provisioning process is not a specific input to BellSouth's cost

study. (Pate Surrebuttal Testimony, pp. 3-4). There are two categories of ordering process fallout: fallout caused by a system design and fallout caused by CLEC errors on the LSR. Id. at 4. Fallout rate caused by a system design represents those LSRs for services that can be requested electronically, but have not been designed to flow through BellSouth's ordering systems. BellSouth disputes AT&T/WorldCom's contention that the fallout is caused by error. Id. at 5. In response to charges that errors take place in the provisioning process, BellSouth states that it is unrealistic to expect a flawless OSS. Id. at 6. BellSouth disputes claims by AT&T/WorldCom that its cost study does not reflect implementation of forward-looking efficient electronic interfaces. The cost study projects improvements in fallout for connects and disconnects for UNE-P combinations. Id. at 6-7. BellSouth dismisses AT&T/WorldCom's proposed 1.3 percent fallout rate as unsubstantiated. Id. at 7.

BellSouth's hot cut process offerings include both order coordination ("OC") and order coordination with a specified conversion time ("OC-TS"). It is this duel offering that BellSouth claims is responsible for AT&T/WorldCom's misapprehension that the functions covered by the order coordination for a specified conversion time are recovered twice. (Tr. 454). Contrary to assertions by AT&T/WorldCom, BellSouth contends that the nonrecurring charges for the OC-TS hot cuts are not recovered in the non-recurring charges for all unbundled loops. (Tr. 455).

AT&T/WorldCom proposed several modifications to BellSouth's non-recurring cost study to ensure that the non-recurring charges only reflect the costs for activities required in a forward-looking environment. AT&T/WorldCom cited to non-recurring charges recently ordered in other states to establish the overstatement in BellSouth's proposed non-recurring charges. (AT&T/WorldCom Post-Hearing Brief, p. 93).

According to AT&T/WorldCom, BellSouth has relied upon the flawed "Georgia Work Time" study for many of the task times for the various UNE work centers. BellSouth's reliance on time and motion studies and the work sampling methodology means that its study reflects embedded costs rather than forward-looking prices. Id. at 96. On this point, AT&T/WorldCom claim that BellSouth's cost study does not account for the efficiencies related to transitioning from manual to electronic handling of orders. Id. It would be assumed that handling orders electronically would take less time.

AT&T/WorldCom provided an analysis of the "Georgia Work Time" study to demonstrate the flawed data collection procedures used in the study. The study has sampling errors which produce invalid results, incorrectly assumes that all work activities have the same duration, included work activities in the study for non-CLEC related activities, did not provide precise definitions for how to record strokes for tasks, had calculation errors in the work papers and used data in an arbitrary manner. Id. at 98-104. In addition, AT&T/WorldCom question the time periods used in the study. Even though the study was for a ten (10) day period, some of the activities were measured for fourteen (14) days. Also, the ten (10) day period was not a sufficient amount of time to determine if this period was representative of what occurs in the work center during the remaining part of the year. (Mount-Campbell Rebuttal Testimony, pp. 8-9). Finally, AT&T/WorldCom argue that BellSouth's use of work sampling to measure some activities and self-reported time studies for others is inconsistent. Moreover, self-reporting time studies are fundamentally unreliable. Id. at 11-13.

AT&T/WorldCom also detailed the specific adjustments that are needed for BellSouth's non-recurring cost study to reflect forward-looking task times for the SAC and CWINS centers. Because the "Georgia Work Time" study was flawed, AT&T/WorldCom relied upon the year 2000 Florida cost study for SAC labor times and probability percentages. (AT&T/WorldCom Post-Hearing Brief, p. 108). For CWINS, AT&T/WorldCom also relied upon the Florida cost study for labor times for work activities and probability percentages to determine how often the activity would occur. Id. at 109.

As to the COFWG, AT&T/WorldCom contend that the work times should be reduced for the technicians to install jumpers and perform loop testing. In the experience of its witness, Mr. Turner, it should take the same amount of time to install and disconnect a jumper. (Tr. 1649). Also, Mr. Turner stated that only one technician is needed to wire and test an SL1 loop and that only a limited amount of testing is required. (Tr. 1651). AT&T/WorldCom also eliminated the CWINS task times for LNP because BellSouth has separate rate elements in the cost study to recover LNP costs. (AT&T/WorldCom Post-Hearing Brief, p. 109).

AT&T/WorldCom also modified BellSouth's non-recurring cost study with respect to the costs for I&M labor. AT&T/WorldCom eliminated the labor time related to functions that would be recovered in the unbundled loop recurring rate. (Tr. 1647).

AT&T/WorldCom next addressed the service order costs and non-recurring UNE-P migration charges proposed by BellSouth. The service order costs, which are composed primarily of labor costs for the LCSC, are inflated because the task times for the LCSC are based upon the "Georgia Work Time" study. (Tr. 1656). Mr. Turner testified that the underlying data indicates that BellSouth included in its Georgia analysis work that was not performed for Georgia. (Tr. 1656). Even though BellSouth later revised the times for the LCSC, AT&T/WorldCom contend that the LCSC task times are still inflated.

AT&T/WorldCom recommend that the Commission reduce BellSouth's non-recurring charges by reflecting the use of dedicated inside plant ("DIP) and dedicated outside plant ("DOP"). The use of DIP and DOP means that the wiring in the field and in the central office from the loop to the switch is already in place so that an order can be fulfilled electronically without the need for a field technician. (AT&T/WorldCom Post-Hearing Brief, p. 126). BellSouth uses DIP and DOP in order to provide immediate service to the next customer at that customer's premises. Id. BellSouth's own data indicates that a high percentage of all loops can be provisioned in this manner. Id. at 127.

AT&T/WorldCom claim that hot cuts are necessary for CLECs to use, but that BellSouth's proposed charge for hot cuts effectively precludes their use. Id. at 127. AT&T/WorldCom set forth the following four problems stemming from BellSouth's reliance on work sampling in developing its rate for hot cuts: (1) "many of the functions BellSouth identified in the 'order Coordination for Specified Conversion Time' non-recurring charge are functions that are already recovered in the non-recurring charge for the unbundled loop," (2) "BellSouth relied on the inaccurate work sampling approach for the CWINS functions," (3) BellSouth included

unnecessary levels of managers, and (4) BellSouth included two levels of technicians for work that a single technician could perform. Id. at 128-29.

Allegiance makes arguments similar to those made by AT&T/WorldCom regarding BellSouth's proposed non-recurring charges. Allegiance contends that BellSouth's non-recurring cost studies are fundamentally flawed because they rely upon a flawed work sampling study. (Allegiance Post-Hearing Brief pp. 32-33). Allegiance specifically addresses BellSouth's proposed hot cut rates and concludes that they are excessive, not reflective of forward-looking costs and will have a negative impact on facilities-based competition. Id at 36).

AccuTel states that the non-recurring charges BellSouth has proposed for UNE-P are excessive when compared to other states. AccuTel argues that the disparity is not justified because there should be no significant difference between the rates proposed by BellSouth and those of other ILECs. (AccuTel Post-Hearing Brief, pp. 1-2).

In both testimony and brief, Covad issued several general criticisms about BellSouth's proposed non-recurring charges for xDSL loops. Covad's witness panel, Terry L. Murray and Joseph P. Riolo, emphasized that the non-recurring charges are inflated because BellSouth included unnecessary tasks and inflated task times in the non-recurring cost study. (Tr. 1425). In addition, Covad's witness panel testified that BellSouth assumed higher task times for xDSL-capable loops when compared to the same tasks for voice-grade loops. (Tr. 1425). In brief, Covad outlined a number of additional problems with BellSouth's non-recurring cost study. These problems consisted of the inclusion of fieldwork in the non-recurring cost study that should be included in the recurring cost study, the assumption that all DSL-capable loops must be designed, the assumption of an unreasonable amount of manual process for a forward-looking cost study, the inclusion of tasks for loop make up even for loops offered without loop makeup and the inclusion of a shared and common cost markup. (Covad Post-Hearing Brief, pp. 25-26). Covad also argued that the Commission should adopt Covad's recommendation for non-recurring charges to connect xDSL-capable loops. Id. at 26.

Covad argues that BellSouth's non-recurring rates for line shared loops are unreasonable. Covad notes that BellSouth did not explain why the proposed rates in this docket are 40 percent higher than what BellSouth proposed in Docket No. 11900-U. Id. at 17. Covad states that the proposed non-recurring charge for BellSouth-owned splitters does not comply with TELRIC and results from problems with BellSouth's cost study. Id. The non-recurring charges for BellSouth-owned line splitters were based upon the "Georgia Work Time" study that did not have sufficient data for line sharing orders on which to base the non-recurring costs. BellSouth did not make forward-looking adjustments to this data and included inappropriate and unnecessary task times for the CSCM, CRSG and COSMOS/Switch work group. Id at p. 18. Finally, Covad contends that the non-recurring cost study duplicates tasks for the CSCM work group and over recovers the cost for BellSouth owned splitters. Id. at 18-20.

Covad argues that consistent with the Commission's decision in Docket No. 11900-U, there should be not be a non-recurring charge for CLEC-owned splitters. Covad also proposes a reduction to BellSouth's proposed per-line activation charge. For BellSouth-owned splitters, BellSouth proposes a per-line activation charge of $40.19; for CLEC-owned splitters, BellSouth

proposes a per-line activation charge of $35.63. Covad argues that an appropriate charge for both of these elements would be $8.67. The problems that Covad identifies with BellSouth's per-line activation cost study include incomplete documentation, inflated fallout percentages, unnecessary tasks included in the COSMOS/SWITCH group, inflated task times for the central office and inappropriate assumptions about line and station transfers. Id. at 21-23.

Covad agrees with AT&T/WorldCom that the service order charges BellSouth proposed are not forward-looking and should be rejected by the Commission. Id. at 33. BellSouth exaggerated the time required for manual processing of UNE-P orders and the assumed fallout rate for such orders should be lower. Id. at 34. Covad argues that BellSouth has included in its OSS charges aimed at recovering its competitive entry costs from its competitors and an "Ongoing Process" charge that is not non-recurring. Covad argues that both these categories of costs should be disallowed from the non-recurring rate, although Covad states it would be appropriate to allow an additive to recurring UNE charges to recover the "Ongoing Process" charge. Id. at 35-39). According to Covad, BellSouth should not be allowed to pass its competitive entry costs onto CLECs. If BellSouth were required to pay these costs, Covad also argues that the Commission should disallow recovery of an electronic ordering charge for Line Sharing because these costs are already recovered in BellSouth's recurring rates. Id. at 39.

Discussion

Although BellSouth contends that the Georgia Work Time Study was based upon the Commission order in Docket No. 11900-U, BellSouth also admits that the study was used to support task times for UNEs other than those covered by the Commission Order. Rates in this docket cannot be based upon a time and motion/work sampling study that does not take into account forward-looking labor and task times to provision UNEs. The Commission's analysis consists of examining both whether the model is structured to capture forward-looking costs and whether the estimates of these costs are reasonable. The problem with the time and motion studies as pointed out by other parties to the docket and admitted to by BellSouth is that these studies include embedded inputs. (Tr. 474). While BellSouth claims that it made adjustments to these embedded inputs to arrive at forward-looking costs, other parties to the docket have made strong cases that these adjustments were either not made or inadequate.

As to the specific modifications, the Commission finds that several of the arguments by AT&T/WorldCom, Allegiance, AccuTel and Covad's regarding eliminating certain tasks and reducing the task times for various BellSouth centers have merit. For example, the Commission agrees with Covad that BellSouth included higher task times for DSL-Capable Loops in comparison to analog loops for the same tasks. Also, even BellSouth agrees with ATT/WorldCom's position that the LCSC time associated with handling UNE-P orders that fall-out should be dramatically reduced from the forty minutes included in BellSouth's cost studies. (Tr. 448). In addition, the Commission finds persuasive AT&T/WorldCom's argument that BellSouth's dispatch probability should be reduced based on data taken from CWINS sampling work papers.

Therefore, not only is BellSouth's use of its Georgia Work Time Study problematic because the study is not forward-looking, but it is also inaccurate. The record reflects that CLEC witnesses

had ample expertise to support their recommendations. For instance, AT&T/WorldCom witness Mr. Turner has had experience provisioning, engineering and testing circuits. (Tr. 1753). Taking into consideration both the adjustments to the study that the evidence reflects would result from a forward-looking study and the adjustments related to the inflated work times and unnecessary tasks, the Staff recommended that all of the non-recurring rates BellSouth filed on January 18, 2002 be reduced by fifty (50) percent. The Commission agrees with this methodology and believes that this reduction will result in reasonable non-recurring rates.

18. xDSL Loops and Related Services

In Docket No. 11900-U, the Commission established rates for xDSL elements that were just, reasonable and consistent with TELRIC.

In this proceeding, BellSouth filed new cost studies and rates for xDSL elements. BellSouth argues that the rates it proposes for xDSL loops and related services are based on comprehensive cost studies, are just and reasonable, and should be adopted by this Commission. (BellSouth Post-Hearing Brief, pp. 50-60).

Covad was the only party to provide a detailed critique of BellSouth's cost study for xDSL elements. Covad contends that BellSouth has not only failed to meet its burden that the proposed xDSL rates, terms and conditions are forward-looking, cost based, just and reasonable, but also that the rates, terms and conditions proposed by BellSouth are anticompetitive and would destroy competition in the nascent xDSL markets in Georgia (Covad Post-Hearing Brief, p. 45).

The xDSL issues raised by BellSouth in this proceeding fall into three general categories: (1) xDSL loops, (2) loop conditioning and (3) line splitting and line sharing. Each category is discussed below.

a) xDSL loops

Positions of the Parties

BellSouth offers CLECs a wide array of xDSL-capable loops. These loops have different technical parameters, and some are designed circuits, while others are not. BellSouth has proposed new recurring and nonrecurring rates for these xDSL-capable loops and has proffered cost studies in an effort to support those proposed rates. The primary dispute regarding xDSL loops is BellSouth's proposal to charge different rates for different types of xDSL compatible loops.

BellSouth asserts recurring costs differ between designed xDSL-capable loops and designed voice grade loops. In support of its assertion, BellSouth claims that substantial differences exist between the work activities required to provision a designed xDSL-capable loop and to provision a designed voice grade loop. For example, BellSouth claims that, unlike a voice grade loop, a number of factors require it to dispatch technicians to designed xDSL-capable loops in order for the technician to locate compatible facilities and to perform the testing necessary to ensure that

the xDSL-capable loop meets applicable technical parameters. (BellSouth Post-Hearing Brief, p. 51).

BellSouth contends that there also are substantial differences in the cost of an ISDN-capable loop and a voice grade loop for both recurring and non-recurring costs. With respect to recurring costs, BellSouth states that an ISDN-capable loop served by a DLC system requires additional time slots in order to function. Id. at 51-52. Non-recurring activities related to provisioning an ISDN-capable loop includes substantial work that is not required in the provisioning of a voice grade loop. Id. at 52.

Covad argues that the models BellSouth used to generate its conclusions regarding xDSL loops are flawed and produce results that are unreasonable on their face. Among the flaws claimed by Covad are faulty design assumptions, faulty network assumptions, unnecessary electronics and excessive ISDN/ISDL line card costs. (Covad Post-Hearing Brief, pp. 30-32). Covad takes issue with what it characterizes as BellSouth's "separate and unequal" approach to costing IDSL-capable loops. This characterization describes BellSouth's decision to perform runs for IDSL/ISDN loops separate from, and with different modeling assumptions than, its analog loops. Covad asserts that this practice is inconsistent with the way that BellSouth would jointly provision IDSL and POTS loops in a forward-looking network. As an example of the problems that result from BellSouth's flawed methodology, Covad notes that BellSouth calculated costs for all-copper loops used to provide IDSL that are higher than the costs for copper loops used to provide POTS service, even though those loops are virtually identical. Id. at 11.

Discussion

The Commission has broad authority to prescribe conditions that will foster the maximum level of competition in the deployment of xDSL services. Two years ago, in Docket No. 11900-U, the Commission, after a lengthy hearing and complete briefing by all parties, established nonrecurring rates that set a baseline of efficiency for BellSouth in the provisioning of xDSL elements. The rates approved in that proceeding are just, reasonable and fall within the range that a reasonable application of TELRIC would produce. In order to increase the rates over what was approved in Docket No. 11900-U, evidence must be presented to show that either the Commission erred in its earlier decision or circumstances have changed such that higher rates are now warranted.

BellSouth has not demonstrated that an increase to its rates for xDSL loops is justified at this time. The Staff has recommended that the rates ordered by this Commission in Docket No. 11900-U remain in effect for at least another 12 months from the date of this Order. The Commission agrees with that recommendation. At that time, the Commission will establish a generic proceeding to review those UNE rates.

b) Loop conditioning

Positions of the Parties

BellSouth has proposed new rates for loop conditioning (also referred to as Unbundled Loop Modification or "ULM"). BellSouth proposed new rates designed to recover the costs it incurs when it conditions a loop by removing load coils or bridged tap on behalf of a requesting carrier. Although BellSouth acknowledges that a forward-looking network being designed today would not include load coils, BellSouth asserts that these costs should be recovered because CLECs are requesting unloaded copper loops from BellSouth's existing network, which contains both load coils and bridged tap. Therefore, BellSouth argues that the removal of these elements is an on-going cost. (BellSouth Post-Hearing Brief, p. 53).

BellSouth further asserts that the FCC allows incumbents to recover the costs associated with loop conditioning, notwithstanding that load coils may not be included in a "forward-looking" network design, and BellSouth points to the FCC's grant of 271 applications to Verizon Pennsylvania and other incumbents that charge for loop conditioning as further evidence of this FCC stance. Id. at pp. 53-54.

BellSouth responds to several claims raised by Covad. First, BellSouth disputes Covad's assertion that non-recurring conditioning charges would result in double recovery of the forward-looking costs for fully "conditioned" loops. BellSouth argues that Covad is incorrect because conditioning is not captured in maintenance expenses. Id at 54. BellSouth also states that Covad's argument that its loop conditioning charges are reflected in its plant maintenance costs is without merit. While acknowledging that a portion of the maintenance expense may reflect the conditioning of its outside plant, BellSouth states that this work is done at BellSouth's discretion at a time when performing such conditioning work makes sense, such as in conjunction with another job. Id. In the case of loop conditioning requested by a CLEC, however, BellSouth contends it is required to perform the conditioning work, even though it may never otherwise condition that loop and such work may be inefficient to perform. Id. at 54-55.

Covad argues that there should be no loop conditioning charges for loops less than 18,000 feet long. Non-recurring "conditioning" charges are fundamentally inconsistent with the economic principles that guide the pricing of all unbundled network elements, including xDSL-capable loops. (Covad Post-Hearing Brief, p. 41). Covad notes that network engineering guidelines in place for more than two decades call for a loop architecture that does not deploy load coils, excessive bridged tap or repeaters that inhibit the provision of advanced services such as ISDN and xDSL-based services. Id. at FN 70.

Covad also asserts that "BellSouth only incurs the cost for 'conditioning' activities because it is less expensive for BellSouth to utilize its embedded network, even with the added cost of occasional 'conditioning' activities, than it is to build an entire network anew today." Id. at 42. Since BellSouth receives a benefit from using a largely depreciated network, it should not be allowed to recover from its competitors the costs of making the existing network function like a new one. Id.

Finally, Covad points to BellSouth's admission that T-1, DS-1 and ISDN loops must be "conditioned" to support those services as confirmation that a loop conditioning charge is unfair. Since BellSouth does not impose a separate nonrecurring charge on its retail customers for this work, for BellSouth to charge its competitors would be either discriminatory or suggestive that BellSouth is already recovering "conditioning" charges as part of its routine maintenance charges. Id. at 42.

Discussion

Again, in Docket No. 11900-U, the Commission determined that the rate for loop conditioning should be $0.00. The record does not justify a change to the prior Commission determination at this time. The record reflects that BellSouth's recurring charge for unbundled DSL-capable loops already includes the cost of providing loops that are free of load coils and other DSL inhibitors. Allowing additional recovery for loop conditioning in the non-recurring charge results in excessive charges to CLECs. Excessive charges for loop conditioning will create a barrier to competition. As such, the rates ordered by this Commission in Docket No. 11900-U shall remain in effect for at least another 12 months from the date of this Order. At such time, the Commission will establish a generic proceeding in which it will review those xDSL rates, reconsider the testimony filed in this docket and give the parties an opportunity to file supplementary testimony.

c) Line splitting and line sharing

Positions of the Parties

The issue of line splitting arises when a CLEC providing voice service over a UNE-P arrangement wants to permit another CLEC to utilize the high frequency portion of that loop to provide a data service. To facilitate line splitting, the loop and the port must be disconnected so that the loop can be terminated to a collocated splitter owned and maintained by the CLEC.

BellSouth argues that the Commission should reconsider its order in Docket No. 11900-U and adopt BellSouth's proposed recurring rates for line splitting so that if CLECs order this product in the future, the applicable rates correctly reflect the costs incurred by BellSouth in furnishing all the network elements involved. (BellSouth Post-Hearing Brief, pp. 57-58). Specifically, BellSouth argues that when a splitter is inserted, "the UNE-P no longer exists, and the line splitting arrangement requires more central office cabling and cross connections than a UNE-P arrangement." Id. at 58-59.

BellSouth contends that in its Texas 271 Order[13] the FCC recognized that the UNE-P cannot be provisioned in a line splitting arrangement. Instead, CLECs can order line splitting to replace the UNE-P arrangement. BellSouth argues that the difference in central office architecture inherent in transitioning a UNE-P arrangement to line splitting should be recognized in rates. Id. at 59.

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[13] Memorandum Opinion and Order, *In re: Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc., d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Texas*, CC Docket No. 00-65, ¶ 325 (June 30, 2000)

BellSouth relies on the Commission's decision in Docket No. 11900-U that it was not obligated to mount splitters directly to the main distributing frame ("MDF") for its position that it is entitled to charge CLECs for splitters installed in other locations. Id. at 59.

AT&T/WorldCom argue that the Commission's decision in Docket No. 11900-U was to require CLECs, in a line splitting arrangement, to pay BellSouth the UNE-P rate when providing both xDSL and voice service on the same loop utilizing BellSouth's UNE-P. (AT&T/WorldCom Post-Hearing Brief, p. 188). AT&T/WorldCom contrast this earlier Commission ruling with BellSouth's proposal in this proceeding. AT&T/WorldCom stress that BellSouth admitted that "the addition of DSL in a UNE-P arrangement requires the simple addition of two cross-connects in order to deliver the DSL or data signal to a CLEC's collated cage for routing to the CLEC's DSL network." Id. at 189. The significance of the "simple addition" required is that the UNE-P is not significantly altered by the addition of DSL. In fact, the same loop and switch port handles the voice signal whether or not DSL is added. Therefore, the UNE-P rates should apply. Id. at 190.

Covad asserts that BellSouth has provided insufficient data to support its proposed line sharing rates. Covad argues that BellSouth's recurring and nonrecurring rates for the cost of a splitter and the costs of putting a line shared loop into service are excessive because BellSouth has: (1) improperly inflated the materials costs of line splitter and related equipment; (2) added unnecessary and costly testing shelves to these splitters; (3) vastly overstated the cost of installation; (4) added potentially duplicative costs to the total cost of these elements; and (5) loaded nonrecurring costs with unnecessary and unsupported tasks. (Covad Post-Hearing Brief, pp. 12-13). As an example of the impact these improper methods in developing costs have had on the proposed charges to CLECs, Covad cites to BellSouth's proposed charge for splitters that is 40 percent higher than the charge BellSouth proposed in the xDSL Docket. Id. at 17.

Covad also complains that BellSouth has ignored portions of the Commission order from Docket No. 11900-U. With respect to the costs of mounting splitters other than to the MDF, Covad contends that the Commission decided that CLECs should not be responsible for any costs over and above those BellSouth would incur with an MDF-mounted splitter configuration. Thus, argues Covad, rates must be based on a frame-mounted splitter regardless of the configuration BellSouth chooses to use. Id. at 13. Covad argues that BellSouth erred in proposing to charge CLECs for choosing to mount the splitter in a less efficient location than the MDF. Id.

Discussion

As with the two prior sections on xDSL Loops and Related Services, the record does not support modifying the decision the Commission reached in Docket No. 11900-U. BellSouth must demonstrate that its proposed rates are just, reasonable, cost-based and forward-looking as required by law. This Commission finds that BellSouth has not made such a demonstration to justify amending the line sharing and line splitting rates at this time. The concerns raised by Covad indicate that BellSouth's proposed increases to rates would work as a barrier to competition.

The rates set two years ago in Docket No. 11900-U by this Commission shall remain in effect for at least another twelve months. Those rates set a baseline of efficiency for BellSouth in the provisioning of xDSL elements and are just, reasonable and consistent with TELRIC.

As discussed above, the Commission will establish a generic proceeding one year from the date of this order to review these xDSL rates, including line sharing and line splitting, and will reconsider the testimony filed in this Docket while giving the parties an opportunity to file supplementary testimony.

(19)   Operational Support System

OSS are the electronic systems that BellSouth developed specifically to provide CLECs with the ability to transmit an LSR electronically and utilize BellSouth's existing legacy ordering processing systems. Both resale and UNE LSRs can be transmitted via these interfaces or a CLEC can manually submit an LSR.

OSS costs include development and implementation, ongoing processing, and fall out. The development and implementation cost includes "labor costs for the project requirements, computer program development and enhancement and system software costs." (Tr. 678). The ongoing processing costs are costs associated with dispensation of the LSR and the maintenance of the electronic interfaces. The fall out costs are for LCSC labor costs associated with handling an LSR that falls out. (Tr.678). BellSouth states that its proposed rates are consistent with the Commission order in Docket No. 7061-U that provided for recovery from the industry of the costs incurred to implement OSS electronic interfaces. (Tr. 678). This recovery is only fair being that BellSouth incurred these costs as a result of the CLECs' preference to submit orders. In Docket No. 7061-U, the Commission established rates for electronic access to BellSouth's OSS based upon the volume of orders submitted along with an incremental charge for loops ordered manually. BellSouth has updated its cost studies and proposes rates based on a "per Local Service Request" for UNE and resale orders. This new rate structure provides for charges based upon whether the LSR is submitted manually or electronically or for a UNE or resold service. (Tr. 678-79).

BellSouth assumed that the various interfaces used to process electronically a CLEC order are integrated. In its cost study, these interfaces were considered as a total system. (Tr. 679). BellSouth argues that its cost study captures the efficiencies of building a complete solution. BellSouth also responds to the allegations made by other parties to the docket that its recurring costs already recover the OSS costs. BellSouth witness, Ms. Caldwell, testified that BellSouth removed all directly identified costs from the development of the shared and common factors. (Tr. 679).

AT&T/WorldCom and Covad argue that any OSS costs that BellSouth incurs are recovered in the recurring rates through the support assets and overhead loading factors that are applied to all UNEs. Therefore, these parties argue that a specific non-recurring OSS charge is not warranted. According to AT&T/WorldCom, OSS is just a software package that runs on computers. ILECs capitalize the first generic of the software and expense all later versions. (AT&T/WorldCom

Post-Hearing Brief, p. 118). The BSCC uses these expense accounts to calculate the recurring costs in providing UNEs. Therefore, OSS costs are already recovered in the recurring rates. Id.

Allegiance takes the position that BellSouth's OSS proposal violates TELRIC because its non-recurring cost study does not rely upon efficient OSS. Allegiance argues that an efficient OSS would not require manual intervention for fallout regardless of whether such fallout was associated with CLEC ordering errors or BellSouth system design errors. (Allegiance Post-Hearing Brief, p. 42). Furthermore, Allegiance argues that BellSouth's cost study assumes a higher fallout rate than what BellSouth's own data demonstrates. If the Commission adopts a fallout rate, Allegiance recommends adoption of the rate proposed by AT&T/WorldCom. Id. at 44-46.

Discussion

In Docket No. 7061-U, the Commission ordered that BellSouth recover OSS charges through a monthly charge from CLECs that use BellSouth electronic interfaces. (Order, p. 57). In this proceeding, BellSouth proposes to change this rate design to recover OSS costs solely on a "per LSR basis." The Commission addressed this question in Docket No. 7061-U. The Commission determined that this type of rate design would have a chilling effect on CLECs placing orders, and that this chilling effect would negatively impact competition. Id. The logic of the Commission's prior decision holds true today. Therefore, the Commission rejects BellSouth's proposal to alter the previously approved rate design.

AT&T/WorldCom, Allegiance and Covad oppose a non-recurring charge for OSS. The Commission has previously determined that CLECs should bear the costs incurred by BellSouth to develop and implement these interfaces. This decision remains sound because these are costs incurred by BellSouth in response to orders submitted by CLECs.

The Staff has recommended that the OSS rates from Docket No. 7061-U remain in effect. The evidence does not support a finding that the prior rates are unreasonable. The Commission agrees with the Staff recommendation on this issue and finds that the initial charge of $200 for use the OSS and a monthly charge of $550.00 for up to 1,000 orders and $110.00 per thousand orders above the first 1,000 each month to be reasonable and cost-based.

III. Conclusion and Ordering Paragraphs

The Commission concludes and finds that the rates, terms and conditions as discussed in the preceding sections of this Order should be adopted for the interconnection with and unbundling of BellSouth's telecommunications services in Georgia and comply with the requirements of the Telecommunications Act of 1996 and the Georgia Telecommunications and Competition Development Act of 1995.

WHEREFORE IT IS ORDERED, that all findings, conclusions, statements, and directives made by the Commission and contained in the foregoing sections of this Order are hereby adopted as findings of fact, conclusions of law, statements of regulatory policy, and orders of this Commission.
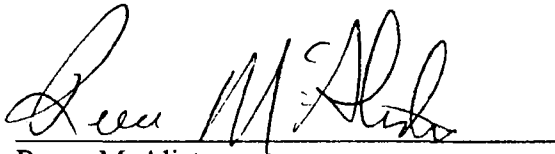
ORDERED FURTHER, the cost-based rates determined by the Commission in this Order (ATTACHMENT A) are established as the rates for BellSouth's unbundled network elements. BellSouth shall submit such compliance filings as are necessary to reflect and implement the rates and policies established by this Order. Within 30 days from the date of this order, BellSouth shall file a revised Statement of Generally Available Terms and Conditions (SGAT) reflecting and implementing the rates and policies established by this Order.

ORDERED FURTHER, the Commission shall reevaluate the availability of UNEs every three years in a manner consistent with the Third Report and Order.
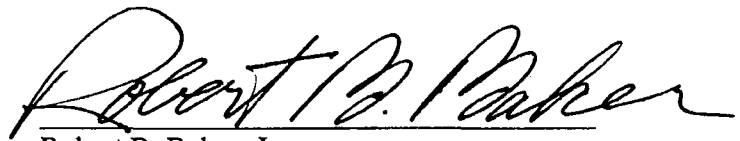
ORDERED FURTHER, that a motion for reconsideration, rehearing, or oral argument or any other motion shall not stay the effective date of this Order, unless otherwise ordered by the Commission.

ORDERED FURTHER, that jurisdiction over these matters is expressly retained for the purpose of entering such further Order or Orders as this Commission may deem just and proper.

The above by action of the Commission in Administrative Session on the18th day of March, 2003.

Reece McAlister
Executive Secretary

_6-23-03_
Date

Robert B. Baker, Jr.
Chairman

June 24, 2003
Date

Unbundled Network Elements Cost Summary								

Study Name:
State: A.1.1 $13.14 P.1.1 $12.30

				INSTALLATION			DISCONNECT		
		Zone	Recurring	Non Recurring	Nonrecurring First	Nonrecurring Additional	Non Recurring	Nonrecurring First	Nonrecurring Additional

A.0 UNBUNDLED LOCAL LOOP

A.1 2-WIRE ANALOG VOICE GRADE LOOP

Ref	Description	Zone	Recurring	Non Recurring	First	Additional	Non Recurring	First	Additional
A.1.1	2-Wire Analog Voice Grade Loop - Service Level 1	1	$10.24		$40.02	$9.99		$5.61	$1.72
		2	$15.37		$40.02	$9.99		$5.61	$1.72
		3	$30.44		$40.02	$9.99		$5.61	$1.72
A.1.2	2-Wire Analog Voice Grade Loop - Service Level 2	1	$11.26		$79.85	$24.65		$18.92	$7.87
		2	$16.43		$79.85	$24.65		$18.92	$7.87
		3	$31.49		$79.85	$24.65		$18.92	$7.87
A.1.6	Engineering Information			$7.30					

A.2 SUB-LOOP

Ref	Description	Zone	Recurring	Non Recurring	First	Additional	Non Recurring	First	Additional
A.2.1	Sub-Loop Feeder Per 2-Wire Analog Voice Grade Loop	1	$5.72		$77.57	$23.66		$18.92	$7.87
		2	$7.40		$77.57	$23.66		$18.92	$7.87
		3	$13.86		$77.57	$23.66		$18.92	$7.87
A.2.2	Sub-Loop Distribution Per 2-Wire Analog Voice Grade Loop	1	$6.37		$28.46	$3.85		$2.20	$0.01
		2	$9.88		$28.46	$3.85		$2.20	$0.01
		3	$18.59		$28.46	$3.85		$2.20	$0.01
A.2.11	Sub-Loop Distribution Per 4-Wire Analog Voice Grade Loop	1	$5.74		$31.07	$4.79		$2.27	$0.01
		2	$9.89		$31.07	$4.79		$2.27	$0.01
		3	$17.97		$31.07	$4.79		$2.27	$0.01
A.2.13	Network Interface Device Cross Connect				$2.45	$2.45			
A.2.14	2-Wire Intrabuilding Network Cable (INC)		$3.61		$28.46	$3.85		$2.20	$0.01
A.2.15	4-Wire Intrabuilding Network Cable (INC)		$7.67		$31.07	$4.79		$2.27	$0.01
A.2.17	Sub-Loop - Per Cross Box Location - CLEC Feeder Facility Set-Up			$255.76					
A.2.18	Sub-Loop - Per Cross Box Location - Per 25 Pair Panel Set-Up			$7.29					
A.2.19	Sub-Loop - Per Building Equipment Room - CLEC Feeder Facility Set-Up			$175.09					
A.2.20	Sub-Loop - Per Building Equipment Room - Per 25 Pair Panel Set-Up			$51.61					
A.2.21	Sub-Loop - Per Cross Box Location - CLEC Distribution Facility Set-Up			$255.76					
A.2.24	Sub-Loop - Per 4-Wire Analog Voice Grade Loop / Feeder Only	1	$12.83		$89.60	$26.71		$19.52	$8.12
		2	$12.06		$89.60	$26.71		$19.52	$8.12
		3	$12.09		$89.60	$26.71		$19.52	$8.12
A.2.25	Sub-Loop - Per 2-Wire ISDN Digital Grade Loop / Feeder Only	1	$12.95		$162.56	$29.05		$18.23	$6.97
		2	$15.83		$162.56	$29.05		$18.23	$6.97
		3	$21.54		$162.56	$29.05		$18.23	$6.97
A.2.29	Sub-Loop - Per 4-Wire 56 or 64 Kbps Digital Grade Loop / Feeder Only	1	$14.86		$170.69	$33.41		$18.82	$7.20
		2	$15.58		$170.69	$33.41		$18.82	$7.20
		3	$18.03		$170.69	$33.41		$18.82	$7.20
A.2.30	Sub-Loop - Per 2-Wire Copper Loop / Feeder Only	1	$3.63		$138.71	$26.67		$16.68	$6.97
		2	$3.27		$138.71	$26.67		$16.68	$6.97
		3	$2.79		$138.71	$26.67		$16.68	$6.97
A.2.32	Sub-Loop - Per 4-Wire Copper Loop / Feeder Only	1	$5.56		$156.47	$29.61		$17.22	$7.20
		2	$4.58		$156.47	$29.61		$17.22	$7.20
		3	$4.29		$156.47	$29.61		$17.22	$7.20
A.2.40	Sub-Loop - Per 2-Wire Copper Loop / Distribution Only	1	$5.75		$28.46	$3.85		$2.20	$0.01
		2	$7.21		$28.46	$3.85		$2.20	$0.01
		3	$8.80		$28.46	$3.85		$2.20	$0.01
A.2.42	Sub-Loop - Per 4-Wire Copper Loop / Distribution Only	1	$6.12		$31.07	$4.79		$2.27	$0.01
		2	$6.12		$31.07	$4.79		$2.27	$0.01
		3	$8.69		$31.07	$4.79		$2.27	$0.01
A.2.44	Network Interface Device (NID) - 2 line				$32.86	$20.69			
A.2.45	Network Interface Device (NID) - 6 line				$56.03	$43.86			

A.3 LOOP CHANNELIZATION AND CO INTERFACE (INSIDE CO)

Ref	Description	Zone	Recurring	Non Recurring	First	Additional	Non Recurring	First	Additional
A.3.12	Unbundled Loop Concentration - System A (TR008)		$172.78		$431.36	$20.36			
A.3.13	Unbundled Loop Concentration - System B (TR008)		$39.21		$334.86	$20.36			
A.3.14	Unbundled Loop Concentration - System A (TR303)		$201.60		$431.36	$20.36			
A.3.15	Unbundled Loop Concentration - System B (TR303)		$67.30		$334.86	$20.36			
A.3.16	Unbundled Loop Concentration - DS1 Line Interface Card		$3.50		$50.91	$29.41		$19.79	$3.22
A.3.17	Unbundled Loop Concentration - POTS Card		$1.45		$7.84	$2.28		$2.64	$1.32
A.3.18	Unbundled Loop Concentration - ISDN (Brite Card)		$5.86		$7.84	$2.28		$2.64	$1.32
A.3.19	Unbundled Loop Concentration - SPOTS Card		$3.81		$7.84	$2.28		$2.64	$1.32
A.3.20	Unbundled Loop Concentration - Specials Card		$3.50		$7.84	$2.28		$2.64	$1.32
A.3.21	Unbundled Loop Concentration - TEST CIRCUIT Card		$27.35		$7.84	$2.28		$2.64	$1.32
A.3.22	Unbundled Loop Concentration - Digital 19, 56, 64 Kbps Data		$5.76		$7.84	$2.28		$2.64	$1.32

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional Indicated by * after cost element description
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					INSTALLATION			DISCONNECT		
						Non	Nonrecurring		Non	Nonrecurring
			Zone	Recurring	Non Recurring	First	Additional	Non Recurring	First	Additional
		Unbundled Network Elements Cost Summary								
Study Name:										
State:		A.1.1 $13.14 P.1.1 $12.30								
A.4	4-WIRE ANALOG VOICE GRADE LOOP									
	A.4.1	4-Wire Analog Voice Grade Loop	1	$17.33		$93.01	$26.17		$19.52	$6.12
			2	$20.74		$93.01	$26.17		$19.52	$6.12
			3	$26.61		$93.01	$26.17		$19.52	$6.12
A.5	2-WIRE ISDN DIGITAL GRADE LOOP									
	A.5.1	2-Wire ISDN Digital Grade Loop	1	$21.69		$180.06	$35.25		$18.23	$6.97
			2	$25.27		$180.06	$35.25		$18.23	$6.97
			3	$40.17		$180.06	$35.25		$18.23	$6.97
	A.5.6	Universal Digital Channel	1	$21.69		$44.69	$31.55		$0.00	$0.00
			2	$25.27		$44.69	$31.55		$0.00	$0.00
			3	$40.17		$44.69	$31.55		$0.00	$0.00
A.6	2-WIRE ASYMMETRICAL DIGITAL SUBSCRIBER LINE (ADSL) COMPATIBLE LOOP									
	A.6.1wLMU	2-WIRE ASYMMETRICAL DIGITAL SUBSCRIBER LINE (ADSL) COMPATIBLE LOOP (Nonrecurring w/ LMU)								
		A.6.1 2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop	1	$11.23						
			2	$12.97						
			3	$20.62						
		A.6.5 2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (Nonrecurring w/ LMU)				$44.69	$31.55		$0.00	$0.00
	A.6.1woLMU	2-WIRE ASYMMETRICAL DIGITAL SUBSCRIBER LINE (ADSL) COMPATIBLE LOOP (Nonrecurring w/o LMU)								
		A.6.1 2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop	1	$11.23						
			2	$12.97						
			3	$20.62						
		A.6.6 2-Wire Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop (Nonrecurring w/o LMU)				$44.69	$31.55		$0.00	$0.00
A.7	2-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP									
	A.7.1wLMU	2-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP (Nonrecurring w/ LMU)								
		A.7.1 2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop	1	$7.66						
			2	$9.09						
			3	$14.45						
		A.7.5 2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/ LMU)				$44.69	$31.55		$0.00	$0.00
	A.7.1woLMU	2-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP (Nonrecurring w/o LMU)								
		A.7.1 2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop	1	$7.66						
			2	$9.09						
			3	$14.45						
		A.7.6 2-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/o LMU)				$44.69	$31.55		$0.00	$0.00
A.8	4-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP									
	A.8.1wLMU	4-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP (Nonrecurring w/ LMU)								
		A.8.1 4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop	1	$10.39						
			2	$12.00						
			3	$19.07						
		A.8.5 4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/ LMU)				$44.69	$31.55		$0.00	$0.00
	A.8.1woLMU	4-WIRE HIGH BIT RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE LOOP (Nonrecurring w/o LMU)								
		A.8.1 4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop	1	$10.39						
			2	$12.00						
			3	$19.07						
		A.8.6 4-Wire High Bit Rate Digital Subscriber Line (HDSL) Compatible Loop (Nonrecurring w/o LMU)				$44.69	$31.55		$0.00	$0.00
A.9	4-WIRE DS1 DIGITAL LOOP									
	A.9.1	4-Wire DS1 Digital Loop	1	$39.61		$211.93	$72.49		$38.24	$7.20
			2	$44.72		$211.93	$72.49		$38.24	$7.20
			3	$59.04		$211.93	$72.49		$38.24	$7.20
	A.9.2	Sub-Loop Feeder Per 4-Wire DS1 Digital Loop	1	$13.58		$190.21	$60.56		$38.24	$7.20
			2	$19.25		$190.21	$60.56		$38.24	$7.20
			3	$33.61		$190.21	$60.56		$38.24	$7.20
	A.9.4	Sub-Loop Per 4-Wire DS1 Digital Loop Set-up Per DSX Location				$183.87	$7.29			
A.10	4-WIRE 19, 56 OR 64 KBPS DIGITAL GRADE LOOP									
	A.10.1	4-Wire 19, 56 or 64 Kbps Digital Grade Loop	1	$21.21		$196.66	$37.00		$18.82	$7.20
			2	$27.22		$196.66	$37.00		$18.82	$7.20

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional indicated by * after cost element description
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Unbundled Network Elements Cost Summary

Study Name:										
State:		A.1.1 $13.14 P.1.1 $12.30								

				Zone	Recurring	INSTALLATION			DISCONNECT		
						Non Recurring	Nonrecurring First	Additional	Non Recurring	Nonrecurring First	Additional
				3	$36.38		$198.66	$37.00		$16.82	$7.20
A.12		CONCENTRATION PER SYSTEM PER FEATURE ACTIVATED (OUTSIDE CENTRAL OFFICE)									
	A.12.1	Unbundled Loop Concentration - System A (TR008)			$229.62		$238.70	$94.21		$109.29	$27.33
	A.12.2	Unbundled Loop Concentration - System B (TR008)			$59.89		$238.70	$94.21		$109.29	$27.33
	A.12.3	Unbundled Loop Concentration - System A (TR303)			$260.06		$238.70	$94.21		$109.29	$27.33
	A.12.4	Unbundled Loop Concentration - System B (TR303)			$90.32		$238.70	$94.21		$109.29	$27.33
	A.12.5	Unbundled Sub-loop Concentration - USLC Feeder Interface		1	$16.50		$190.21	$60.56		$38.24	$7.20
				2	$22.62		$190.21	$60.56		$38.24	$7.20
				3	$54.60		$190.21	$60.56		$38.24	$7.20
	A.12.6	Unbundled Loop Concentration - POTS Card			$1.57		$4.42	$2.28		$2.64	$1.32
	A.12.7	Unbundled Loop Concentration - ISDN (Brte Card)			$6.35		$4.42	$2.28		$2.64	$1.32
	A.12.8	Unbundled Loop Concentration - SPOTS Card			$4.13		$4.42	$2.28		$2.64	$1.32
	A.12.9	Unbundled Loop Concentration - Specials Card			$3.79		$4.42	$2.28		$2.64	$1.32
	A.12.10	Unbundled Loop Concentration - TEST CIRCUIT Card			$29.84		$4.42	$2.28		$2.64	$1.32
	A.12.11	Unbundled Loop Concentration - Digital 19, 56, 64 Kbps Data			$6.24		$4.42	$2.28		$2.64	$1.32
A.13		2-WIRE COPPER LOOP									
	A.13.1wLMU	2-Wire Copper Loop - short (Nonrecurring w/ LMU)									
		A.13.1 2-Wire Copper Loop - short		1	$12.02						
				2	$13.66						
				3	$22.07						
		A.13.8 2-Wire Copper Loop - short (Nonrecurring w/ LMU)					$44.66	$31.55		$0.00	$0.00
	A.13.1woLMU	2-Wire Copper Loop - short (Nonrecurring w/o LMU)									
		A.13.1 2-Wire Copper Loop - short		1	$12.02						
				2	$13.66						
				3	$22.07						
		A.13.9 2-Wire Copper Loop - short (Nonrecurring w/o LMU)					$44.66	$31.55		$0.00	$0.00
	A.13.7wLMU	2-Wire Copper Loop - long (Nonrecurring w/ LMU)									
		A.13.7 2-Wire Copper Loop - long		1	$35.56						
				2	$41.07						
				3	$65.28						
		A.13.10 2-Wire Copper Loop - long (Nonrecurring w/ LMU)					$44.66	$31.55		$0.00	$0.00
	A.13.7woLMU	2-Wire Copper Loop - long (Nonrecurring w/o LMU)									
		A.13.7 2-Wire Copper Loop - long		1	$35.56						
				2	$41.07						
				3	$65.28						
		A.13.11 2-Wire Copper Loop - long (Nonrecurring w/o LMU)					$44.66	$31.55		$0.00	$0.00
	A.13.12	2-Wire Unbundled Copper Loop - Non Design		1	$11.02		$44.69	$22.40		$0.00	$0.00
				2	$12.72		$44.69	$22.40		$0.00	$0.00
				3	$20.22		$44.69	$22.40		$0.00	$0.00
A.14		4-WIRE COPPER LOOP									
	A.14.1wLMU	4-Wire Copper Loop - short (Nonrecurring w/ LMU)									
		A.14.1 4-Wire Copper Loop - short		1	$16.65						
				2	$19.22						
				3	$30.55						
		A.14.8 4-Wire Copper Loop - short (Nonrecurring w/ LMU)					$44.69	$31.55		$0.00	$0.00
	A.14.1woLMU	4-Wire Copper Loop - short (Nonrecurring w/o LMU)									
		A.14.1 4-Wire Copper Loop - short		1	$16.65						
				2	$19.22						
				3	$30.55						
		A.14.9 4-Wire Copper Loop - short (Nonrecurring w/o LMU)					$44.69	$31.55		$0.00	$0.00
	A.14.7wLMU	4-Wire Copper Loop - long (Nonrecurring w/ LMU)									
		A.14.7 4-Wire Copper Loop - long		1	$30.85						
				2	$53.87						
				3	$96.64						
		A.14.10 4-Wire Copper Loop - long (Nonrecurring w/ LMU)					$44.69	$31.55		$0.00	$0.00

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional indicated by * after cost element description
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Unbundled Network Elements Cost Summary

Study Name:
State: A.1.1 $13.14 P.1.1 $12.30

| | | | | | INSTALLATION | | | DISCONNECT | | |
		Zone	Recurring	Non Recurring	Nonrecurring First	Additional	Non Recurring	Nonrecurring First	Additional
A.14.7woLMU	4-Wire Copper Loop - long (Nonrecurring w/o LMU)								
	A.14.7 4-Wire Copper Loop - long	1	$47.56						
		2	$54.93						
		3	$87.30						
	A.14.11 4-Wire Copper Loop - long (Nonrecurring w/o LMU)				$44.69	$31.55		$0.00	$0.00
A.15	UNBUNDLED NETWORK TERMINATING WIRE (NTW)								
A.15.1	Unbundled Network Terminating Wire (NTW) per Pair		$.5330		$25.12	$12.28			
A.16	HIGH CAPACITY UNBUNDLED LOCAL LOOP								
A.16.1	High Capacity Unbundled Local Loop - DS3 - Facility Termination		$253.38		$1,753.23	$131.90		$112.91	$75.88
A.16.2	High Capacity Unbundled Local Loop - DS3 - Per Mile		$10.97						
A.16.4	High Capacity Unbundled Local Loop - OC3 - Facility Termination		$346.04		$1,880.55	$78.62		$66.77	$52.81
A.16.5	High Capacity Unbundled Local Loop - OC3 - Per Mile		$8.74						
A.16.7	High Capacity Unbundled Local Loop - OC12 - Facility Termination		$1,115.03		$1,880.55	$77.47		$66.77	$52.81
A.16.8	High Capacity Unbundled Local Loop - OC12 - Per Mile		$9.06						
A.16.10	High Capacity Unbundled Local Loop - OC48 - Facility Termination		$866.27		$1,880.55	$77.47		$66.77	$52.81
A.16.11	High Capacity Unbundled Local Loop - OC48 - Per Mile		$29.77						
A.16.13	High Capacity Unbundled Local Loop - OC48 - Interface OC12 on OC48		$344.46		$555.56	$139.85		$66.77	$52.81
A.16.15	High Capacity Unbundled Local Loop - STS-1 - Facility Termination		$305.42		$1,753.23	$131.90		$112.91	$75.88
A.16.16	High Capacity Unbundled Local Loop - STS-1 - Per Mile		$10.97						
A.17	LOOP CONDITIONING								
A.17.1	Unbundled Loop Modification - Load Coil / Equipment Removal - short			$0.00					
A.17.2	Unbundled Loop Modification - Load Coil / Equipment Removal - long			$0.00					
A.17.3	Unbundled Loop Modification - Bridged Tap Removal			$0.00					
A.17.4	Unbundled Sub-Loop Modification - 2W/4W Copper Distribution Load Coil/Equipment Removal First/Add'l				$0.00	$0.00			
A.17.5	Unbundled Sub-Loop Modification - 2W/4W Copper Distribution Bridged Tap Removal First/Add'l				$0.00	$0.00			
A.18	MULTIPLEXERS								
A.18.1	Channelization - Channel System DS1 to DS0		$60.75		$105.68	$41.59		$23.75	$4.19
A.18.2	Interface Unit - Interface DS1 to DS0 - OCU-DP Card		$.9963		$11.96	$11.39		$6.61	$6.61
A.18.3	Interface Unit - Interface DS1 to DS0 - BRITE Card		$1.66		$15.61	$11.39		$6.61	$6.61
A.18.4	Interface Unit - Interface DS1 to DS0 - Voice Grade Card		$.4669		$11.96	$11.39		$6.61	$6.61
A.18.5	Channelization - Channel System DS3 to DS1		$121.90		$224.48	$71.83		$40.01	$31.07
A.18.6	Interface Unit - Interface DS3 to DS1		$7.35		$15.61	$11.39		$6.61	$6.61
A.19	LOOP TESTING								
A.19.1	Loop Testing - Basic per 1/2 hour				$25.12	$13.62			
A.19.2	Loop Testing - Overtime per 1/2 hour				$33.21	$17.94			
A.19.3	Loop Testing - Premium per 1/2 hour				$41.29	$22.27			
B.0	UNBUNDLED LOCAL EXCHANGE PORTS AND FEATURES								
B.1	EXCHANGE PORTS								
B.1.1	Exchange Ports - 2-Wire Analog Line Port (Res., Bus., Centrex, Coin)		$1.09		$2.42	$2.31		$1.37	$1.28
B.1.2	Exchange Ports - 4-Wire Analog Voice Grade Port		$6.07		$2.42	$2.31		$1.42	$1.32
B.1.3	Exchange Ports - 2-Wire DID Port		$5.50		$122.26	$18.65		$54.82	$3.45
B.1.4	Exchange Ports - DDITS Port		$41.20		$200.96	$93.00		$65.81	$2.33
B.1.5	Exchange Ports - 2-Wire ISDN Port		$6.09		$76.39	$51.50		$45.67	$10.38
B.1.6	Exchange Ports - 4-Wire ISDN DS1 Port		$65.13		$198.74	$97.29		$72.95	$17.69
B.1.7	Exchange Ports - 2-Wire Analog Line Port (PBX)		$1.09		$26.68	$13.63		$11.48	$0.83
B.4	FEATURES								
B.4.13	Features per port		$0.00						
B.4.14	Centrex Select Feature			$0.00					
B.5	CENTREX FEATURES								
B.5.1	NAR Establishment *				$0.00	$0.00		$0.00	$0.00
C.0	UNBUNDLED SWITCHING AND LOCAL INTERCONNECTION								
C.1	END OFFICE SWITCHING								
C.1.1	End Office Switching Function, Per MOU		$.0006153						
C.1.2	End Office Trunk Port - Shared, Per MOU		$.0001226						

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional indicated by * after cost element description
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Unbundled Network Elements Cost Summary

Study Name:
State:

A.1.1 §15.14 P.1.1 §12.30

| | | | | INSTALLATION | | | DISCONNECT | |
| | | | | Non Recurring | | | Non Recurring | |
Code	Description	Zone	Recurring	Recurring	First	Additional	Recurring	First	Additional
C.1.3	Common Interconn Function, per Line, per Month		$.4237						
C.2	**TANDEM SWITCHING**								
C.2.1	Tandem Switching Function Per MOU		$.0000972						
C.2.2	Tandem Trunk Port - Shared, Per MOU		$.0001557						
D.0	**UNBUNDLED TRANSPORT AND LOCAL INTEROFFICE TRANSPORT**								
D.1	**COMMON TRANSPORT**								
D.1.1	Common Transport - Per Mile, Per MOU		$.0000027						
D.1.2	Common Transport - Facilities Termination Per MOU		$.0001914						
D.2	**INTEROFFICE TRANSPORT - DEDICATED - VOICE GRADE**								
D.2.1	Interoffice Transport - Dedicated - 2-Wire Voice Grade - Per Mile		$.0057						
D.2.2	Interoffice Transport - Dedicated - 2- Wire Voice Grade - Facility Termination		$12.87		$48.48	$16.49		$16.58	$5.00
D.3	**INTEROFFICE TRANSPORT - DEDICATED - DS0 - 64kb KBPS**								
D.3.1	Interoffice Transport - Dedicated - DS0 - Per Mile		$.0057						
D.3.2	Interoffice Transport - Dedicated - DS0 - Facility Termination		$7.63		$48.48	$16.49		$16.58	$5.00
D.4	**INTEROFFICE TRANSPORT - DEDICATED - DS1**								
D.4.1	Interoffice Transport - Dedicated - DS1 - Per Mile		$.1154						
D.4.2	Interoffice Transport - Dedicated - DS1 - Facility Termination		$34.19		$111.03	$60.29		$31.36	$21.75
D.5	**LOCAL CHANNEL - DEDICATED**								
D.5.1	Local Channel - Dedicated - 2-Wire Voice Grade		$7.74		$121.07	$53.30		$46.40	$13.37
D.5.2	Local Channel - Dedicated - 4-Wire Voice Grade		$8.72		$125.62	$34.43		$45.40	$13.37
D.5.7	Local Channel - Dedicated - DS3 - Per Mile		$1.44						
D.5.8	Local Channel - Dedicated - DS3 - Facility Termination		$147.01		$445.61	$145.16		$112.91	$75.66
D.5.10	Local Channel - Dedicated - OC3 - Per Mile		$2.61						
D.5.11	Local Channel - Dedicated - OC3 - Facility Termination		$470.85		$567.47	$96.32		$66.77	$52.61
D.5.13	Local Channel - Dedicated - OC12 - Per Mile		$9.06						
D.5.14	Local Channel - Dedicated - OC12 - Facility Termination		$1,584.11		$567.47	$96.32		$66.77	$52.61
D.5.16	Local Channel - Dedicated - OC48 - Per Mile		$20.77						
D.5.17	Local Channel - Dedicated - OC48 - Facility Termination		$813.50		$567.47	$96.32		$66.77	$52.61
D.5.18	Local Channel - Dedicated - OC48 - Interface OC12 on OC48		$316.06		$561.32	$148.50		$66.77	$52.61
D.5.21	Local Channel - Dedicated - STS-1 - Facility Termination		$154.62		$445.01	$145.16		$112.91	$75.66
D.5.23	Local Channel - Dedicated - STS-1 - Per Mile		$1.44						
D.5.24	Local Channel - Dedicated - DS1	1	$18.16		$149.46	$111.20		$40.36	$26.12
		2	$52.47		$149.46	$111.20		$40.36	$26.12
		3	$157.03		$149.46	$111.20		$40.36	$26.12
D.6	**INTEROFFICE TRANSPORT - DEDICATED - DS3**								
D.6.1	Interoffice Transport - Dedicated - DS3 - Per Mile		$2.53						
D.6.2	Interoffice Transport - Dedicated - DS3 - Facility Termination		$342.02		$320.47	$96.32		$66.77	$52.61
D.7	**INTEROFFICE TRANSPORT - DEDICATED - OC3**								
D.7.1	Interoffice Transport - Dedicated - OC3 - Per Mile		$3.60						
D.7.2	Interoffice Transport - Dedicated - OC3 - Facility Termination		$968.02		$567.47	$96.32		$66.77	$52.61
D.8	**INTEROFFICE TRANSPORT - DEDICATED - OC12**								
D.8.1	Interoffice Transport - Dedicated - OC12 - Per Mile		$12.81						
D.8.2	Interoffice Transport - Dedicated - OC12 - Facility Termination		$3,513.35		$567.47	$96.32		$66.77	$52.61
D.9	**INTEROFFICE TRANSPORT - DEDICATED - OC48**								
D.9.1	Interoffice Transport - Dedicated - OC48 - Per Mile		$28.06						
D.9.2	Interoffice Transport - Dedicated - OC48 - Facility Termination		$5,741.27		$567.47	$96.32		$66.77	$52.61
D.9.4	Interoffice Transport - Dedicated - OC48 - Interface OC12 on OC48		$638.04		$561.32	$148.50		$66.77	
D.10	**INTEROFFICE TRANSPORT - DEDICATED - STS-1**								
D.10.1	Interoffice Transport - Dedicated - STS-1 - Per Mile		$2.53						
D.10.2	Interoffice Transport - Dedicated - STS-1 - Facility Termination		$358.87		$320.47	$96.32		$66.77	$52.61
D.12	**INTEROFFICE TRANSPORT - DEDICATED - 4-WIRE VOICE GRADE**								
D.12.1	Interoffice Transport - Dedicated - 4-Wire Voice Grade - Per Mile		$.0057						

Unbundled Network Elements Cost Summary

Study Name:
State:

A.1.1 §13.14 P.1.1 §12.39

		Zone	Recurring	INSTALLATION Non Recurring	INSTALLATION Nonrecurring First	INSTALLATION Nonrecurring Additional	DISCONNECT Non Recurring	DISCONNECT Nonrecurring First	DISCONNECT Nonrecurring Additional
D.12.2	Interoffice Transport - Dedicated - 4-Wire Voice Grade - Facility Termination								$3.00
E.6	**SIGNALING NETWORK, DATA BASES, & SERVICE MANAGEMENT SYSTEMS**		$10.76		$46.46	$18.46		$16.36	
E.1	**800 ACCESS TEN DIGIT SCREENING**								
E.1.1	800 Access Ten Digit Screening, Per Call		$.0008543						
E.1.2	800 Access Ten Digit Screening, Reservation Charge Per 800 Number Reserved				$2.50	$0.43			
E.1.3	800 Access Ten Digit Screening, Per 800 No. Established W/O POTS Terminations				$5.65	$0.78		$4.24	$0.51
E.1.4	800 Access Ten Digit Screening, Per 800 No. Established With POTS Terminations				$5.65	$0.78		$4.24	$0.51
E.1.5	800 Access Ten Digit Screening, Customized Area of Service Per 800 Number				$2.50	$1.25			
E.1.6	800 Access Ten Digit Screening, Multiple InterLATA CXR Routing Per CXR Requested Per 800 No.				$2.93	$1.66			
E.1.7	800 Access Ten Digit Screening, Change Charge Per Request				$2.93	$0.43			
E.1.8	800 Access Ten Digit Screening, Call Handling and Destination Features				$2.50				
E.1.9	800 Access Ten Digit Screening, w/ IPL No. Delivery		$.0008543						
E.1.10	800 Access Ten Digit Screening, w/ POTS No. Delivery		$.0008543						
E.2	**LINE INFORMATION DATA BASE ACCESS (LIDB)**								
E.2.1	LIDB Common Transport Per Query		$.0000662						
E.2.2	LIDB Validation Per Query		$.0296662						
E.2.3	LIDB Originating Point Code Establishment or Charge			$33.24			$39.35		
E.3	**CCS7 SIGNALING TRANSPORT**								
E.3.1	CCS7 Signaling Connection, Per 56/64 Kbps Facility		$8.73	$34.77			$18.91		
E.3.2	CCS7 Signaling Termination, Per STP Port		$106.90						
E.3.3	CCS7 Signaling Usage, Per Call Setup Message		$.0000132						
E.3.4	CCS7 Signaling Usage, Per TCAP Message		$.0000527						
E.3.7	CCS7 Signaling Connection, Per link (A link) (same as E.3.1)		$8.73	$34.77			$18.91		
E.3.8	CCS7 Signaling Connection, Per link (B link) (also known as D link) (same as E.3.1)		$8.73	$34.77			$18.91		
E.3.9	CCS7 Signaling Usage, Per ISUP Message (same as E.3.3)		$.0000132						
E.3.10	CCS7 Signaling Usage Surcharge, per link		$907.44						
E.3.11	CCS7 Signaling Point Code, Establishment or Charge, per STP affected			$26.15			$33.32		
E.4	**BELLSOUTH CALLING NAME (CNAM) DATABASE (DB) SERVICE**								
E.4.1	CNAM for DB Owners - Service Establishment, Manual				$22.90			$20.32	
E.4.2	CNAM for Non DB Owners - Service Establishment, Manual				$22.90			$20.32	
E.4.3	CNAM for DB Owners Service Providing with Point Code Establishment				$959.77	$709.83		$251.47	$184.91
E.4.4	CNAM for Non DB Owners Service Providing with Point Code Establishment				$331.99	$237.45		$257.65	$184.91
E.4.5	CNAM for DB and Non DB Owners, Per Query		$.0009924						
E.5	**BELLSOUTH ACCESS TO E911 SERVICE**								
E.5.1	BellSouth E911 Access - Local Channel - Dedicated - 2-Wire Voice Grade (Same as D.5.1)		$7.74		$121.07	$53.30		$46.40	$13.37
E.5.2	BellSouth E911 Access - Interoffice Transport - Dedicated - 2-Wire Voice Grade Per Mile (Same as D.2.1)		$.0057						$3.00
E.5.3	BellSouth E911 Access - Interoffice Transport - Dedicated - 2-Wire Voice Grade Per Facility Termination (Same as D.2.2)		$12.87		$48.46	$18.46		$16.36	$26.12
E.5.4	BellSouth E911 Access - Local Channel - Dedicated - DS1 (Same as D.5.24)	1	$18.16		$149.46	$111.20		$40.36	$26.12
		2	$52.47		$149.46	$111.20		$40.36	$26.12
		3	$157.03		$149.46	$111.20		$40.36	
E.5.5	BellSouth E911 Access - Interoffice Transport - Dedicated - DS1 Per Mile (Same as D.4.1)		$.1154						
E.5.6	BellSouth E911 Access - Interoffice Transport - Dedicated - DS1 Per Facility Termination (Same as D.4.2)		$34.19		$111.03	$80.26		$31.36	$21.73
E.6	**LNP QUERY SERVICE**								
E.6.1	LNP Cost Per query		$.0006200						
E.6.2	LNP Service Establishment Manual				$12.66			$11.09	
E.6.3	LNP Service Providing with Point Code Establishment				$574.87	$280.99		$251.47	$184.91
G.8	**SELECTIVE ROUTING**								
G.9	**SELECTIVE ROUTING (AIN SOLUTION)**								
G.9.1	Selective Routing Per Unique Line Class Code Per Request Per Switch		$.0020368		$102.19	$61.15		$12.66	$0.34
G.11	**SELECTIVE ROUTING (SYSTEM SOLUTION LINE CLASS CODES)**								
G.11.1	Service Establishment per CLEC		$101,311.87				$7,633.28		
G.11.2	Service Establishment per End Office		$158.92				$1.54		
G.11.4	Query Cost		$.0020368						
H.8	**COLLOCATION**								

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Study Name:
State:

A.1.f §13.14 P.1.f §12.30

Unbundled Network Elements Cost Summary

		Zone	Recurring	INSTALLATION Non Recurring First	INSTALLATION Non Recurring Additional	DISCONNECT Non Recurring First	DISCONNECT Non Recurring Additional
H.1	**PHYSICAL COLLOCATION**						
H.1.1	Physical Collocation - Application Cost - Initial			$1,265.86		$0.50	
H.1.5	Physical Collocation - Fiber Entrance Cable Installation, per Cable			$736.93		$21.51	
H.1.6	Physical Collocation - Floor Space per Sq. Ft.		$4.52				
H.1.7	Physical Collocation - Cable Support Structure per Fiber Entrance Cable		$7.21				
H.1.8	Physical Collocation - Power per Fused Amp		$4.78				
H.1.9	Physical Collocation - 2-Wire Cross-Connects		$.0197				
H.1.10	Physical Collocation - 4-Wire Cross-Connects		$.0390				
H.1.11	Physical Collocation - DS1 Cross-Connects		$.3726				
H.1.12	Physical Collocation - DS3 Cross-Connects		$4.06				
H.1.13	Physical Collocation - 2-Wire POT Bay		$.0181				
H.1.14	Physical Collocation - 4-Wire POT Bay		$.0604				
H.1.15	Physical Collocation - DS1 POT Bay		$.4264				
H.1.16	Physical Collocation - DS3 POT Bay		$3.80				
H.1.17	Physical Collocation - Security Escort - Basic, per Half Hour				$16.52	$10.63	
H.1.18	Physical Collocation - Security Escort - Overtime, per Half Hour				$21.92	$14.19	
H.1.19	Physical Collocation - Security Escort - Premium, per Half Hour				$27.31	$17.55	
H.1.23	Physical Collocation - Welded Wire Cage - First 100 Sq. Ft.		$160.45				
H.1.24	Physical Collocation - Welded Wire Cage - Add'l 50 Sq. Ft.		$15.74				
H.1.31	Physical Collocation - 2-Fiber Cross-Connect		$1.72				
H.1.32	Physical Collocation - 4-Fiber Cross-Connect		$3.30				
H.1.33	Physical Collocation - 2-Fiber POT Bay		$12.97				
H.1.34	Physical Collocation - 4-Fiber POT Bay		$17.50				
H.1.37	Physical Collocation - Security Access System - Security System per square Foot per Central Office		$.0106				
H.1.38	Physical Collocation - Security Access System - New Access Card Activation, per Card			$22.00			
H.1.39	Physical Collocation - Security Access System - Administrative Charge, existing Access Card, per Card			$5.38			
H.1.40	Physical Collocation - Security Access System - Replace Lost or Stolen Card, per Card			$17.01			
H.1.41	Physical Collocation - Space Preparation - C.O. Modification per square ft.		$3.01				
H.1.42	Physical Collocation - Space Preparation - Common Systems Modification per square ft. - Capless		$2.23				
H.1.43	Physical Collocation - Space Preparation - Common Systems Modification per Cage		$75.61				
H.1.45	Physical Collocation - Space Preparation - Firm Order Processing			$141.10			
H.1.46	Physical Collocation - Application Cost - Subsequent			$1,085.48			
H.1.47	Physical Collocation - Space Availability Report per C.O.			$246.75			
H.1.50	Physical Collocation - 120V, Single Phase Standby Power Cost		$5.16				
H.1.51	Physical Collocation - 240V, Single Phase Standby Power Cost		$10.30				
H.1.52	Physical Collocation - 120V, Three Phase Standby Power Cost		$15.44				
H.1.53	Physical Collocation - 277V, Three Phase Standby Power Cost		$35.85				
H.1.54	Physical Collocation - Security Access - Initial Key, per Key			$13.20			
H.1.55	Physical Collocation - Security Access - Key, Replace Lost or Stolen Key, per Key			$13.20			
H.1.56	Physical Collocation - Copper Entrance Cable Support Structure, Per Each 100 Pairs		$.2629			$21.51	
H.1.57	Physical Collocation - Copper Entrance Cable Installation, Per Cable			$795.15			
H.1.58	Physical Collocation - Copper Entrance Cable Installation, Per Each 100 Pairs			$9.12			
H.2	**VIRTUAL COLLOCATION**						
H.2.1	Virtual Collocation - Application Cost			$600.52		$0.50	
H.2.2	Virtual Collocation - Fiber Entrance Cable Installation, per Cable			$736.93		$21.51	
H.2.3	Virtual Collocation - Floor Space Per Sq. Ft.		$4.52				
H.2.4	Virtual Collocation - Power per Fused Amp		$4.78				
H.2.5	Virtual Collocation - Cable Support Structure, Per Entrance Cable		$7.57				
H.2.6	Virtual Collocation - 2-wire Cross Connects		$.0166				
H.2.7	Virtual Collocation - 4-wire Cross Connects		$.0375				
H.2.8	Virtual Collocation - DS1 Cross Connects		$.3726				
H.2.9	Virtual Collocation - DS3 Cross Connects		$4.06				
H.2.10	Virtual Collocation - Security Escort - Basic, Per Half Hour				$16.52	$10.63	
H.2.11	Virtual Collocation - Security Escort - Overtime, Per Half Hour				$21.92	$14.19	
H.2.12	Virtual Collocation - Security Escort - Premium, Per Half Hour				$27.31	$17.55	
H.2.16	Virtual Collocation - 2-Fiber Cross Connect		$1.72				
H.2.17	Virtual Collocation - 4-Fiber Cross Connect		$3.45				
H.2.20	Virtual Collocation - Maintenance in the CO - Basic, per Half Hour				$26.54	$10.63	
H.2.21	Virtual Collocation - Maintenance in the CO - Overtime, per Half Hour				$35.44	$14.19	
H.2.22	Virtual Collocation - Maintenance in the CO - Premium, per Half Hour				$44.34	$17.55	
H.2.23	Virtual Collocation - Copper Entrance Cable Support Structure, Per Each 100 Pairs		$.2500				
H.2.24	Virtual Collocation - Copper Entrance Cable Installation, Per Cable			$795.15		$21.51	
H.2.25	Virtual Collocation - Copper Entrance Cable Installation, Per Each 100 Pairs			$9.12			

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Unbundled Network Elements Cost Summary

Study Name:
State:

A.1.1.813.14 P.1.1.812.30

		Zone	Recurring	INSTALLATION			DISCONNECT		
				Non Recurring	Nonrecurring First	Additional	Non Recurring	Nonrecurring First	Additional
H.3	**ASSEMBLY POINT**								
H.3.1	Assembly Point - 3-Wire Cross Connects		$.2566						
H.3.2	Assembly Point - 4-Wire Cross Connects		$.5132						
H.3.3	Assembly Point - DS1 Cross Connects		$0.50						
H.4	**ADJACENT COLLOCATION**								
H.4.1	Adjacent Collocation - Space Cost per Sq. Ft.		$.1940						
H.4.2	Adjacent Collocation - Electrical Facility Cost per Linear Ft.		$4.01						
H.4.3	Adjacent Collocation - 2-Wire Cross-Connects		$.0172						
H.4.4	Adjacent Collocation - 4-Wire Cross-Connects		$.0344						
H.4.5	Adjacent Collocation - DS1 Cross-Connects		$.3606						
H.4.6	Adjacent Collocation - DS3 Cross-Connects		$4.73						
H.4.7	Adjacent Collocation - 2-Fiber Cross-Connect		$1.66						
H.4.8	Adjacent Collocation - 4-Fiber Cross-Connect		$3.24						
H.4.9	Adjacent Collocation - Application Cost			$1,382.19			$0.50		
H.4.16	Adjacent Collocation - 120V, Single Phase Standby Power Cost per AC Breaker Amp		$5.14						
H.4.17	Adjacent Collocation - 240V, Single Phase Standby Power Cost per AC Breaker Amp		$10.30						
H.4.18	Adjacent Collocation - 120V, Three Phase Standby Power Cost per AC Breaker Amp		$15.44						
H.4.19	Adjacent Collocation - 277V, Three Phase Standby Power Cost per AC Breaker Amp		$5.65						
H.6	**PHYSICAL COLLOCATION IN THE REMOTE TERMINAL (RT)**								
H.6.1	Physical Collocation in The Remote Terminal - Application Fee			$300.61			$112.62		
H.6.2	Physical Collocation in The Remote Terminal - Per Rack/Bay		$143.23						
H.6.3	Physical Collocation in The Remote Terminal - Security Access Key			$13.20					
H.6.4	Physical Collocation in the RT - Space Availability Report per premise requested			$106.94					
H.6.5	Physical Collocation in the RT - Remote Site CLLI Code Request, per CLLI Code Requested			$36.04					
H.7	**COLLOCATION CABLE RECORDS**								
H.7.1	Collocation Cable Records - per request			$743.86	$478.09		$125.75	$125.75	
H.7.2	Collocation Cable Records - per VG/DS0 Cable Record *			$317.60	$317.60		$177.77	$177.77	
H.7.3	Collocation Cable Records - per Each 100 Pair VG/DS0 *			$4.46	$4.46		$3.30	$3.30	
H.7.4	Collocation Cable Records - DS1, per T1TE *			$2.22	$2.22		$2.63	$2.63	
H.7.5	Collocation Cable Records - DS1, per T3TE *			$7.76	$7.76		$9.19	$9.19	
H.7.6	Collocation Cable Records - Fiber Cable, per cable record *			$83.45	$83.45		$73.57	$73.57	
H.8	**Virtual Collocation in the Remote Terminal (RT)**								
H.8.1	Virtual Collocation in the Remote Terminal (RT) - Application Fee (Same as H.6.1)			$300.61			$112.62		
H.8.2	Virtual Collocation in the Remote Terminal (RT) - Per Bay/Rack Of Space (Same as H.6.2)		$143.23						
H.8.3	Virtual Collocation in the Remote Terminal (RT) - Space Availability Report Per Premises Requested (Same as H.6.4)			$106.94					
H.8.4	Virtual Collocation in the RT- Remote Site CLLI Code Request, per CLLI Code Requested (Same as H.6.5)			$36.04					
H.9	**COLLOCATION - BRSDD**								
	COLLOCATION - BRSDD								
H.9	H.9.2 BellSouth Remote Site DLEC Data (BRSMD), per Compact Disc per Central Office per Occurrence			$14.98			$0.03		
	H.9.1 BellSouth Remote Site DLEC Data (BRSDD), per Compact Disc per Central Office			$62.28					
				$116.64					
I.0	**INTERIM SERVICE PROVIDER NUMBER PORTABILITY**								
I.1	**INTERIM SERVICE PROVIDER NUMBER PORTABILITY - RCF**								
I.1.1	Service Provider Number Portability - RCF, Per Number Ported		$1.55	$0.25			$0.45		
I.1.2	Service Provider Number Portability - RCF, Per Additional Path		$.5262				$0.45		
I.2	**SERVICE PROVIDER NUMBER PORTABILITY - DID**								
I.2.1	Service Provider Number Portability - DID, Per Number Ported, Residence			$0.42					
I.2.2	Service Provider Number Portability - DID, Per Number Ported, Business			$0.42					
I.2.4	Service Provider Number Portability - DID, Per Trunk Termination, Initial		$41.20	$108.50			$28.71		
I.2.5	Service Provider Number Portability - DID, Per Trunk Termination, Subsequent		$41.20	$67.19			$28.71		
I.4	**SERVICE PROVIDER NUMBER PORTABILITY RIPH**								
I.4.1	Service Provider Number Portability - RIPH, Functionality, Per Central office			$76.46			$2.29		
I.4.2	Service Provider Number Portability - RIPH, Functionally, Per Rearrangement			$19.56					
I.4.3	Service Provider Number Portability - RI-PH, Per Number Ported		$1.24	$0.20			$0.02		

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Unbundled Network Elements Cost Summary

Study Name:
State: A.1.1 $13.14 P.1.1 $12.90

					INSTALLATION				DISCONNECT		
			Zone	Recurring	Non Recurring	Nonrecurring First	Nonrecurring Additional	Non Recurring	Nonrecurring First	Additional
J.0	OTHER										
J.1	DARK FIBER										
	J.1.2	Dark Fiber, Per Four Fiber Strands, Per Route Mile or Fraction Thereof - Local Channel/Loop		$48.84		$1,745.90	$87.54		$73.64	$18.70
	J.1.3	Dark Fiber, Per Four Fiber Strands, Per Route Mile or Fraction Thereof - Interoffice		$23.29		$1,776.53	$89.75		$73.64	$18.70
J.3	LOOP MAKE-UP										
	J.3.1	Mechanized Loop Make-up		$.8183						
	J.3.3	Manual Loop Make-up w/o Facility Reservation Number			$15.19					
	J.3.4	Manual Loop Make-up w/ Facility Reservation Number			$19.85					
J.4	LINE SHARING SPLITTER IN THE CENTRAL OFFICE										
	J.4.1	Line Sharing Splitter - per Splitter System 96-Line Capacity in the Central Office		$131.00	$0.00			$0.00		
	J.4.2	Line Sharing Splitter - per Splitter System 24-Line Capacity in the Central Office		$32.00	$0.00			$0.00		
	J.4.2	Line Sharing Splitter - per Splitter System 8-Line Capacity in the Central Office		$11.00	$0.00			$0.00		
	J.4.3	Line Sharing Splitter -- per Line Activation Fee		$0.61		$10.51	$7.70		$7.00	$4.20
	J.4.4	Line Sharing Splitter-per Subsequent Activity per Line Rearrangement in the Central Office (BST/CLEC Owned Splitter)				$36.23	$13.23		$16.94	$1.90
	J.4.7	Line Sharing per CLEC/DLEC Owned Splitter in the C.O. per Occurrence of each group of 24 lines (48 Pairs)		$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
		CLEC-Owned/ILEC Maintained Splitter/ Install per 96 port splitter		$9.60	$0.00	$22.15	$22.15	$0.00	$0.00	$0.00
		CLEC-Owned/ILEC Maintained Splitter/ Install per 24 port splitter		$2.40	$0.00	$6.24	$6.24	$0.00	$0.00	$0.00
		CLEC-Owned/ILEC Maintained Splitter/ Install per 8 port splitter		$0.80	$0.00	$2.08	$2.08	$0.00	$0.00	$0.00
J.5	ACCESS TO THE DCS										
	J.5.1	Customer Reconfiguration Establishment				$1.40			$1.63	
	J.5.2	DS1 DCS Termination with DS0 Switching		$16.65		$24.90	$18.92		$15.04	$11.95
	J.5.3	DS1 DCS Termination with DS1 Switching		$7.09		$18.18	$12.20		$11.14	$8.05
	J.5.4	DS3 DCS Termination with DS1 Switching		$125.62		$24.90	$18.92		$15.04	$11.95
K.0	ADVANCED INTELLIGENT NETWORK (AIN) SERVICES										
K.1	BELLSOUTH AIN SMS ACCESS SERVICE										
	K.1.1	AIN SMS Access Service - Service Establishment, Per State, Initial Setup			$41.41			$41.63		
	K.1.2	AIN SMS Access Service - Port Connection - Dial/Shared Access			$8.15			$9.16		
	K.1.3	AIN SMS Access Service - Port Connection - ISDN Access			$8.15			$9.16		
	K.1.4	AIN SMS Access Service - User Identification Codes - Per User ID Code			$35.29			$26.50		
	K.1.5	AIN SMS Access Service - Security Card, Per User ID Code, Initial or Replacement			$40.24			$11.72		
	K.1.6	AIN SMS Access Service - Storage, Per Unit (100 Kilobytes)		$.0038						
	K.1.7	AIN SMS Access Service - Session, Per Minute		$1.81						
	K.1.8	AIN SMS Access Service - Company Performed Session, Per Minute		$.8323						
K.2	BELLSOUTH AIN TOOLKIT SERVICE										
	K.2.1	AIN Toolkit Service - Service Establishment Charge, Per State, Initial Setup			$41.41			$41.63		
	K.2.2	AIN Toolkit Service - Training Session, Per Customer			$4,236.62					
	K.2.3	AIN Toolkit Service - Trigger Access Charge, Per Trigger, Per DN, Term. Attempt			$8.15			$9.16		
	K.2.4	AIN Toolkit Service - Trigger Access Charge, Per Trigger, Per DN, Off-Hook Delay			$8.15			$9.16		
	K.2.5	AIN Toolkit Service - Trigger Access Charge, Per Trigger, Per DN, Off-Hook Immediate			$8.15			$9.16		
	K.2.6	AIN Toolkit Service - Trigger Access Charge, Per Trigger, Per DN, 10-Digit PODP			$33.96			$14.09		
	K.2.7	AIN Toolkit Service - Trigger Access Charge, Per Trigger, Per DN, CDP			$33.96			$14.09		
	K.2.8	AIN Toolkit Service - Trigger Access Charge, Per Trigger, Per DN, Feature Code			$33.96			$14.09		
	K.2.9	AIN Toolkit Service - Query Charge, Per Query		$.0271438						
	K.2.10	AIN Toolkit Service - Type 1 Node Charge, Per AIN Toolkit Subscription, Per Node, Per Query		$.0059195						
	K.2.11	AIN Toolkit Service - SCP Storage Charge, Per SMS Access Account, Per 100 Kilobytes		$.04						
	K.2.12	AIN Toolkit Service - Monthly report - Per AIN Toolkit Service Subscription		$14.78	$8.15			$5.71		
	K.2.13	AIN Toolkit Service - Special Study - Per AIN Toolkit Service Subscription		$6.46	$8.96					
	K.2.14	AIN Toolkit Service - Call Event Report - Per AIN Toolkit Service Subscription		$8.54	$8.15			$5.71		
	K.2.15	AIN Toolkit Service - Call Event Special Study - Per AIN Toolkit Service Subscription		$.22	$8.96					

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional indicated by * after cost element description
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Unbundled Network Elements Cost Summary

					INSTALLATION			DISCONNECT		
Study Name:					Non Recurring	Nonrecurring		Non Recurring	Nonrecurring	
State:	A.1.1 $13.14 P.1.1 $12.30		Zone	Recurring	Recurring	First	Additional	Recurring	First	Additional
L.0	ACCESS DAILY USAGE FILE (ADUF)									
L.1	ACCESS DAILY USAGE FILE (ADUF)									
	L.1.1	ADUF, Message Processing, per message		$.001713						
	L.1.3	ADUF, Data Transmission (CONNECT:DIRECT), per message		$.00013027						
M.0	DAILY USAGE FILES									
M.1	ENHANCED OPTIONAL DAILY USAGE FILE									
	M.1.1	Enhanced Optional Daily usage File: Message Processing, Per Message		$.227409						
M.2	OPTIONAL DAILY USAGE FILE									
	M.2.1	Optional Daily Usage File: Recording, per Message		$.0000088						
	M.2.2	Optional Daily Usage File: Message Processing, Per Message		$.002167						
	M.2.3	Optional Daily Usage File: Message Processing, Per Magnetic Tape Provisioned		$36.06						
	M.2.4	Optional Daily Usage File: Data Transmission (CONNECT:DIRECT), Per Message		$.00010656						
N.0	NONRECURRING COSTS									
N.1	SERVICE ORDER									
	N.1.1	Electronic Service Order, per local service request - UNE only								
		F.1.61 OSS Electronic Interface, per local service request - Development & Implementation			$0.00			$0.00		
		F.1.62 OSS Electronic Interface, per local service request - Ongoing Process			$0.00			$0.00		
		F.1.61 OSS Electronic Interface, per local service request - Development & Implementation			$0.00			$0.00		
		N.1.1 Electronic Service Order, per local service request - UNE Only per first 1,000 orders			$550.00			$0.00		
		Per next 1000 Orders			$110.00			$0.00		
	N.1.7	Electronic Service Order, per local service request - resale only								
		F.1.61 OSS Electronic Interface, per local service request - Development & Implementation			$0.00			$0.00		
		F.1.62 OSS Electronic Interface, per local service request - Ongoing Process			$0.00			$0.00		
		F.1.61 OSS Electronic Interface, per local service request - Development & Implementation			$0.00			$0.00		
		N.1.7 Electronic Service Order, Per LSR - Resale Only per first 1000 orders			$550.00					
		Per next 1000 orders			$110.00			$0.00		
	N.1.2	Manual Service Order, per local service request - UNE Only			$11.73			$6.13		
	N.1.5	Order Coordination			$18.92					
	N.1.6	Order Coordination for Specified Conversion Time			$57.79					
	N.1.8	Manual Service Order, per local service request - resale only			$21.99					
P.0	UNBUNDLED LOOP COMBINATIONS									
P.1	2-WIRE VOICE GRADE LOOP WITH 2-WIRE LINE PORT (RES, BUS, COIN, CENTREX, PBX)									
	P.1.RESBUS	2-Wire VG Loop/Port Combo (Res, Bus, Coin)								
		P.1.1 2-Wire Voice Grade Loop		$9.32						
		P.1.2 Exchange Port - 2-Wire Line Port (Combination)		$.9019						
			1	$10.22						
				$14.45						
				$.9019						
			2	$15.35						
				$30.14						
				$.9019						
			3	$31.04						
		P.1.3 2-Wire Voice Grade Loop / Line Port Combination - Nonrecurring Costs - Switch-as-is				$0.10	$0.10			
		P.1.18 2-Wire Voice Grade Loop With 2-Wire Line Port - Nonrecurring - new				$10.05	$7.36		$1.37	$1.28
	P.1.PBX	2-Wire VG Loop/Port Combo (PBX)								
		P.1.1 2-Wire Voice Grade Loop		$9.32						
		P.1.2 Exchange Port - 2-Wire Line Port (Combination)		$.9019						
			1	$10.22						

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional Indicated by * after cost element description
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Unbundled Network Elements Cost Summary

Study Name:						INSTALLATION			DISCONNECT		
State:	A.1.1 $13.14 P.1.1 $12.30					Non	Nonrecurring		Non	Nonrecurring	
			Zone	Recurring	Non Recurring	First	Additional	Recurring	First	Additional
				$14.45						
				$.9019						
			2	$15.35						
				$30.14						
				$.9019						
			3	$31.04						
	P.1.13 2-Wire Voice Grade Loop/ Line Port Combination (PBX) Nonrecurring costs - switch-as-is					$7.26	$1.99			
	P.1.14 2-Wire Voice Grade Loop/Line Port Combination (PBX) Nonrecurring Costs, New					$114.21	$40.51		$11.99	$6.00
P.1.CENTREX	2-Wire VG Loop/Port Combo (Centrex)									
	P.1.1 2-Wire Voice Grade Loop			$9.32						
	P.1.2 Exchange Port - 2-Wire Line Port (Combination)			$.9019						
			1	$10.22						
				$14.45						
				$.9019						
			2	$15.35						
				$30.14						
				$.9019						
			3	$31.04						
	P.1.11 Centrex Common Block - Nonrecurring Costs - Switch-as-is					$41.82	$16.61			
	P.1.3 2-Wire Voice Grade Loop / Line Port Combination - Nonrecurring Costs - Switch-as-is					$0.10	$0.10			
						$41.92	$16.71			
	P.1.19 2-Wire Voice Grade Loop With 2-Wire Line Port - Nonrecurring - new					$10.05	$7.38		$1.37	$1.28
P.1.17	PBX Subsequent Activity - Change/Rearrange Multiline Hunt Group				$6.70					
P.1.22	Set up common block - Non-recurring Costs -new (Centrex)					$317.90	$37.59		$46.99	$5.92
P.3	3-WIRE VOICE GRADE LOOP WITH 2-WIRE DID TRUNK PORT									
P.3	2-Wire VG Loop/2-Wire DID Trunk Port									
	A.1.2 2-Wire Analog Voice Grade Loop - Service Level 2			$11.26						
	P.3.2 Exchange Ports - 2-Wire DID Port for Combinations			$5.48						
			1	$16.74						
				$16.43						
				$5.48						
			2	$21.91						
				$31.49						
				$5.48						
			3	$36.98						
	P.3.3 2-Wire Voice Grade Loop / 2-Wire DID Trunk Port Combination - Nonrecurring Costs - Switch-as-is					$6.66	$1.66			
	P.3.6 2-Wire Voice Grade Loop / 2-Wire DID Trunk Port Combination - Nonrecurring Costs -new					$174.86	$13.64		$59.31	$4.27
P.3.7	2-Wire DID Subsequent Activity - Add Trunks, Per Trunk				$26.34					
P.4	2-WIRE ISDN DIGITAL GRADE LOOP WITH 2-WIRE ISDN DIGITAL LINE SIDE PORT									
P.4	2W ISDN Digital Grade Loop/2W ISDN Digital Line Side Port									
	P.4.1 2-Wire ISDN Digital Grade Loop			$13.84						
	P.4.2 Exchange Port - 2-Wire ISDN Line Side Port (Combination)			$5.19						
			1	$19.03						
				$18.56						
				$5.19						
			2	$23.75						

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional indicated by * after cost element description
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Unbundled Network Elements Cost Summary

			INSTALLATION				DISCONNECT		
			Non Recurring	Nonrecurring First	Nonrecurring Additional		Non Recurring	Nonrecurring First	Nonrecurring Additional
		Zone	Recurring						

Study Name:
State:

A.1.1 $13.14 P.1.1 $12.38									
		3	$31.33						
			$5.19						
			$36.51						
P.4.3 2-Wire ISDN Digital Grade Loop / 2-Wire ISDN Line Side Port Combination - Nonrecurring Costs - Switch-as-is				$42.52	$20.99		$43.66		$9.37
P.4.6 2-Wire ISDN Digital Grade Loop / 2-Wire ISDN Line Side Port Combination - Nonrecurring Costs - new				$161.36	$141.66				

P.5 4-WIRE DS1 DIGITAL LOOP WITH 4-WIRE ISDN DS1 DIGITAL TRUNK PORT

P.5	4W DS1 Digital Loop/4W ISDN DS1 Digital Trunk Port								
	A.9.1 4-Wire DS1 Digital Loop			$29.61					
	B.1.6 Exchange Ports - 4-Wire ISDN DS1 Port		1	$65.13					
				$104.74					
		2	$44.72						
			$65.13						
			$109.85						
		3	$59.04						
			$65.13						
			$124.17						
P.5.3 4-Wire DS1 Digital Loop / 4-Wire ISDN DS1 Digital Trunk Port Combination - Nonrecurring Costs - Switch-as-is				$122.98	$77.97		$75.41		$21.90
P.5.10 4-Wire DS1 Digital Loop / 4-Wire ISDN DS1 Digital Trunk Port Combination - Nonrecurring Costs- new				$95.75	$187.42				
P.5.5	4-Wire DS1 Digital Loop / 4-Wire ISDN DS1 Digital Trunk Port Combination - Subsequent Channel Activation - Per Channel			$13.56					
P.5.6	4-Wire DS1 Digital Loop / 4-Wire ISDN DS1 Digital Trunk Port Combination - Subsequent Inward/2-Way Telephone Numbers			$0.50					
P.5.7	4-Wire DS1 Digital Loop / 4-Wire ISDN DS1 Digital Trunk Port Combination - Subsequent Outward Telephone Numbers			$10.72					
P.5.8	4-Wire DS1 Digital Loop / 4-Wire ISDN DS1 Digital Trunk Port Combination - Subsequent Inward Telephone Numbers			$21.43					

P.6 EXTENDED 2-WIRE VOICE GRADE LOOP WITH DEDICATED D01 INTEROFFICE TRANSPORT

P.6-1	First 2W VG In DS1								
	A.1.2 2-Wire Analog Voice Grade Loop - Service Level 2			$11.26					
	D.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination			$34.19					
	A.16.1 Channelization - Channel System DS1 to DS0			$69.75					
	A.16.4 Interface Unit - Interface DS1 to DS0 - Voice Grade Card		1	$6.699					
				$115.06					
			$16.43						
			$34.19						
			$69.75						
		2	$6.699						
			$120.04						
			$31.49						
			$34.19						
			$69.75						
		3	$6.699						
			$135.90						
P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-is				$5.70	$5.70		$6.61		$6.61
P.17.5 Nonrecurring Cost - New DS1 Interoffice Facility w/ I/O MDXing for Combination Use Only				$173.86	$45.73		$43.60		$27.97
P.17.10 Nonrecurring Cost - New VG Local Loop for Combination Use Only				$185.94	$30.38		$16.42		$6.66
P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only				$27.31	$2.90		$16.86		$1.04
				$397.12	$85.01		$79.06		$35.67
P.6.2	Per Mile								
	D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile			$.1154					
P.6.3	Additional 2W VG In same DS1								
	A.1.2 2-Wire Analog Voice Grade Loop - Service Level 2			$11.26					

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional indicated by * after cost element description
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Unbundled Network Elements Cost Summary

Study Name:
State:

A.1.1 812.14 P.1.1 812.38

		INSTALLATION			DISCONNECT		
	Zone	Recurring	Non Recurring First	Nonrecurring Additional	Non Recurring	Nonrecurring First	Nonrecurring Additional

A.18.4 Interface Unit - Interface DS1 to DS0 - Voice Grade Card
| | 1 | $11.73 | | | | | |

		$16.43					
		$.4600					
	2	$16.90					

		$31.49					
		$.4600					
	3	$31.98					

P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only
| | | | $27.33 | $2.90 | | $18.98 | $1.04 |

P.7 EXTENDED 4-WIRE VOICE GRADE LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT
P.7-1 First 4W VG in DS1
A.4.1 4-Wire Analog Voice Grade Loop
| | | $17.33 | | | | | |
D.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination
| | | $34.10 | | | | | |
A.18.1 Channelization - Channel System DS1 to DS0
| | | $69.75 | | | | | |
A.18.4 Interface Unit - Interface DS1 to DS0 - Voice Grade Card
| | | $.4600 | | | | | |
| | 1 | $121.73 | | | | | |

		$20.74					
		$34.10					
		$69.75					
		$.4600					
	2	$125.15					

		$28.91					
		$34.10					
		$69.75					
		$.4600					
	3	$133.22					

P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is
| | | | $6.70 | $6.70 | | $6.61 | $6.61 |
P.17.5 Nonrecurring Cost - New DS1 Interoffice Facility w/ I/O M/Xing for Combination Use Only
| | | | $173.86 | $45.73 | | $43.80 | $27.97 |
P.17.10 Nonrecurring Cost - New VG Local Loop for Combination Use Only
| | | | $195.94 | $39.38 | | $18.42 | $6.96 |
P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only
| | | | $27.33 | $2.90 | | $18.98 | $1.04 |
| | | | $397.12 | $85.01 | | $79.06 | $35.87 |

P.7-2 Per Mile
D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile
| | | $.1154 | | | | | |

P.7-3 Additional 4W VG in same DS1
A.4.1 4-Wire Analog Voice Grade Loop
| | | $17.33 | | | | | |
A.18.4 Interface Unit - Interface DS1 to DS0 - Voice Grade Card
| | | $.4600 | | | | | |
| | 1 | $17.79 | | | | | |

		$20.74					
		$.4600					
	2	$21.21					

		$28.81					
		$.4600					
	3	$29.26					

P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only
| | | | $27.33 | $2.90 | | $18.98 | $1.04 |

P.8 EXTENDED 4-WIRE 56 OR 64 KBPS DIGITAL LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT
P.8-1 First 4W 56 / 64 in DS1
A.10.1 4-Wire 19, 56 or 64 Kbps Digital Grade Loop
| | | $21.21 | | | | | |
D.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination
| | | $34.10 | | | | | |
A.18.1 Channelization - Channel System DS1 to DS0
| | | $69.75 | | | | | |
A.18.2 Interface Unit - Interface DS1 to DS0 - OCU-DP Card
| | | $.9963 | | | | | |

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional indicated by * after cost element description
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Unbundled Network Elements Cost Summary

Study Name:
Series: IA.1.I 512.14 P.1.I 512.30

		Recurring	INSTALLATION Non Recurring	First	Additional	Non Recurring	DISCONNECT First	Nonrecurring Additional
	Zone 1	$126.15						
		$27.22						
		$34.10						
		$99.75						
		$.9963						
	2	$132.16						
		$36.36						
		$34.10						
		$99.75						
		$.9963						
	3	$141.32						
P.17.1 Nonrecurring Cost for Extended Loops or Local Channel and Interoffice Combination Switch -Axis				$6.70	$6.70		$6.61	$6.61
P.17.5 Nonrecurring Cost - New DS1 Interoffice Facility w/ 1/0 MUXing for Combination Use Only				$172.66	$45.73		$43.60	$27.97
P.17.10 Nonrecurring Cost - New VG Local Loop for Combination Use Only				$195.94	$26.36		$16.42	$6.66
P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only				$27.33	$2.90		$16.66	$1.04
				$397.12	$55.01		$79.06	$35.87
P.9-2 Per Mile								
D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		$.1154						
P.9-3 Additional ckt 56 / 64 in same DS1								
A.10.1 - Wire 19, 56 or 64 Kbps Digital Grade Loop		$21.21						
A.18.2 Interface Unit - Interface DS1 to DS0 - DCLOOP Cost		$.9963						
	1	$22.21						
		$27.22						
		$.9963						
	2	$26.22						
		$36.36						
		$.9963						
	3	$37.36						
P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only				$27.33	$2.90		$16.66	$1.04
P.11 EXTENDED 4-WIRE DS1 DIGITAL LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT								
P.11-1 Fixed								
A.11.6 -Wire DS1 Digital Loop		$39.61						
D.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination		$34.19						
	1	$73.80						
		$44.72						
		$34.19						
	2	$78.91						
		$59.04						
		$34.19						
	3	$93.23						
P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -Axis				$6.70	$6.70		$6.61	$6.61
P.17.4 Nonrecurring Cost - New DS1 Interoffice Facility for Combination Use Only				$97.76	$45.73		$43.60	$27.97
P.17.11 Nonrecurring Cost - New DS1 Local Loop for Combination Use Only				$209.45	$70.44		$37.91	$6.66
				$297.21	$118.17		$61.70	$34.83
P.11-2 Per Mile								
D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		$.1154						
P.13 EXTENDED 4-WIRE DS1 DIGITAL LOOP WITH DEDICATED DS3 INTEROFFICE TRANSPORT								
P.13-1 First DS1 in DS3								

Note: Nonrecurring cost on Initial and Subsequent tasks rather than First and Additional indicated by * after cost element description
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Unbundled Network Elements Cost Summary

Study Name:												
State:	A.11 & B.14 P.1.5 $12.30											

				INSTALLATION			DISCONNECT		
				Non Recurring	Nonrecurring First	Additional	Non Recurring	Nonrecurring First	Additional
		Zone	Recurring						

A.9.1 4-Wire DS1 Digital Loop
D.8.2 Interoffice Transport - Dedicated - DS3 - Facility Termination
A.16.5 Channelization - Channel System DS3 to DS1
A.16.6 Interface Unit - Interface DS3 to DS1

	1	$39.61					
		$342.02					
		$121.90					
		$7.35					
		$510.88					

		$44.72					
		$342.02					
		$121.90					
		$7.35					
	2	$515.99					

		$39.04					
		$342.02					
		$121.90					
		$7.35					
	3	$530.31					

P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch - As-Is | | | | $9.70 | $5.70 | | $9.61 | $9.61

P.17.9 Nonrecurring Cost - New DS3 or STS-1 w/ 3/1 MUXing Interoffice Facility for Combination Use Only | | | $325.61 | $77.07 | | $49.56 | $32.96
P.17.11 Nonrecurring Cost - New DS1 Local Loop for Combination Use Only | | | $200.45 | $70.44 | | $37.91 | $9.05
P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only | | | $27.33 | $2.90 | | $16.86 | $1.04
| | | | $562.99 | $150.40 | | $104.32 | $40.77

Per Mile
D.6.1 Interoffice Transport - Dedicated - DS3 - Per Mile | | | $2.53 | | | | |

Additional DS1 in same DS3
A.9.1 4-Wire DS1 Digital Loop | | | $39.61 | | | | |
A.16.6 Interface Unit - Interface DS3 to DS1 | | 1 | $7.35 | | | | |
| | | $46.96 | | | | |

		$44.72				
	2	$7.35				
		$52.07				

		$39.04				
	3	$7.35				
		$56.39				

P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only | | | $27.33 | $2.90 | | $16.86 | $1.04

4-Wire DS1 DIGITAL LOOP WITH DDITS PORT
P.15 4-Wire DS1 Digital Loop with DDITS Port
A.9.1 4-Wire DS1 Digital Loop
B.1.4 Exchange Ports - DDITS Port | | 1 | $39.61 | | | | |
| | | $41.20 | | | | |
| | | $80.81 | | | | |

		$44.72				
	2	$41.20				
		$85.91				

		$39.04				
	3	$41.20				
		$100.24				

P.15.3 4-wire DS1 Digital Loop / DDITS Trunk Port Combination - Nonrecurring Costs - Switch-as-is | | | $132.10 | $66.79 | | | |
P.15.9 4-wire DS1 Digital Loop / DDITS Trunk Port Combination - Nonrecurring Costs - new | | | $562.25 | $185.06 | | $60.17 | $7.96

4-Wire DS1 Digital Loop / DDITS Trunk Port Combination - Subsequent Channel Activation - Per Channel | | | $13.85 | | | | |

P.15.5 2-WIRE LOOP / 2 WIRE VOICE GRADE IO TRANSPORT / 2 WIRE PORT

P.16

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional indicated by - after cost element description
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Unbundled Network Elements Cost Summary

Study Name:
State:

A.1.1 §13.16 P.1.1 §13.30

Item	Description	Zone	Recurring	INSTALLATION Non Recurring	INSTALLATION First	INSTALLATION Additional	DISCONNECT Non Recurring	DISCONNECT First	DISCONNECT Additional
P.16-1	Fixed	1							
	A.1.2 2-Wire Analog Voice Grade Loop - Service Level 2		$11.26						
	D.2.2 Interoffice Transport - Dedicated - 2-Wire Voice Grade - Facility Termination		$12.87						
	B.1.1 Exchange Ports - 2-Wire Analog Line Port (Res., Bus., Central, Coin)		$1.09						
			$25.22						
		2	$16.43						
			$12.87						
			$1.09						
			$30.39						
		3	$31.49		$7.86	$1.66			$18.44
			$12.87						
			$1.09						
			$45.45						
P.16.3 2W VG Loop / 2W VG IO Transport / 2W Port Combination - Nonrecurring Costs - Switch-as-is					$100.05	$43.86		$41.80	
P.16.4 2-Wire VG Loop / 2-Wire VG Interoffice Transport / 2-Wire Port Combination - Nonrecurring Costs, New									
P.16-2	Per Mile								
	D.2.1 Interoffice Transport - Dedicated - 2-Wire Voice Grade - Per Mile		$.0057						
P.17	Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination				$5.70	$5.70		$6.61	$6.61
P.17.1	Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-is								
P.23	EXTENDED 2-WIRE VOICE GRADE LOOP/2-WIRE VOICE GRADE INTEROFFICE TRANSPORT								
P.23-1	Fixed	1							
	A.1.2 2-Wire Analog Voice Grade Loop - Service Level 2		$11.26						
	D.2.2 Interoffice Transport - Dedicated - 2-Wire Voice Grade - Facility Termination		$12.87						
			$24.13						
		2	$16.43						
			$12.87						
			$29.30						
		3	$31.49						
			$12.87						
			$44.36						
P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-is					$5.70	$5.70		$6.61	$6.61
P.17.17 Nonrecurring Cost - New DS0 IOF for Combination Use Only					$69.53	$53.61		$43.42	$27.00
P.17.16 Nonrecurring Cost - New VG Local Loop for Combination Use Only					$195.94	$35.38		$16.42	$6.66
					$262.47	$69.99		$61.84	$34.46
P.23-2	Per Mile								
	D.2.1 Interoffice Transport - Dedicated - 2-Wire Voice Grade - Per Mile		$.0057						
P.24	EXTENDED 4-WIRE VOICE GRADE LOOP/4-WIRE VOICE GRADE INTEROFFICE TRANSPORT								
P.24-1	Fixed	1							
	A.1.1 4-Wire Analog Voice Grade Loop		$17.33						
	D.12.2 Interoffice Transport - Dedicated - 4-Wire Voice Grade - Facility Termination		$10.78						
			$28.10						
		2	$20.74						
			$10.78						
			$31.52						
		3	$28.61						
			$10.78						
			$39.59						
P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-is					$5.70	$5.70		$6.61	$6.61

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional indicated by * after cost element description
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Unbundled Network Elements Cost Summary

Study Name:
State: A.1.1 $13.14 P.1.1 $12.36

			Zone	Recurring	INSTALLATION			DISCONNECT		
					Non Recurring	Nonrecurring		Non Recurring	Nonrecurring	
						First	Additional		First	Additional
	P.17.17 Nonrecurring Cost - New DS0 IOF for Combination Use Only					$86.53	$33.61		$43.42	$27.60
	P.17.10 Nonrecurring Cost - New VG Local Loop for Combination Use Only					$195.94	$36.38		$18.42	$6.86
						$262.47	$69.99		$61.84	$34.46
P.24-2	Per Mile									
	D.12.1 Interoffice Transport - Dedicated - 4-Wire Voice Grade - Per Mile			$.0057						
P.25	EXTENDED DS3 DIGITAL LOOP WITH DEDICATED DS3 INTEROFFICE TRANSPORT									
P.25-1	Fixed									
	A.16.1 High Capacity Unbundled Local Loop - DS3 - Facility Termination			$253.38						
	D.8.2 Interoffice Transport - Dedicated - DS3 - Facility Termination			$342.02						
				$595.40						
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is					$5.70	$5.70		$8.61	$8.61
	P.17.7 Nonrecurring Cost - New DS3 or STS-1 Interoffice Facility for Combination Use Only					$325.91	$77.07		$49.56	$32.80
	P.17.12 Nonrecurring Cost - New DS3 or STS-1 Local Loop for Combination Use Only					$1,260.47	$628.84		$41.53	$20.76
						$1,586.38	$705.90		$91.06	$53.64
P.25-2	Per Mile - Interoffice									
	D.8.1 Interoffice Transport - Dedicated - DS3 - Per Mile			$2.53						
P.25-3	Per Mile - DS3 Loop									
	A.16.2 High Capacity Unbundled Local Loop - DS3 - Per Mile			$10.97						
P.26	EXTENDED STS1 DIGITAL LOOP WITH DEDICATED STS1 INTEROFFICE TRANSPORT									
P.26-1	Fixed									
	A.16.15 High Capacity Unbundled Local Loop - STS-1 - Facility Termination			$305.42						
	D.10.2 Interoffice Transport - Dedicated - STS-1 - Facility Termination			$358.67						
				$664.09						
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is					$5.70	$5.70		$8.61	$8.61
	P.17.7 Nonrecurring Cost - New DS3 or STS-1 Interoffice Facility for Combination Use Only					$325.91	$77.07		$49.56	$32.80
	P.17.12 Nonrecurring Cost - New DS3 or STS-1 Local Loop for Combination Use Only					$1,260.47	$628.84		$41.53	$20.76
						$1,586.38	$705.90		$91.06	$53.64
P.26-2	Per Mile - Interoffice									
	D.10.1 Interoffice Transport - Dedicated - STS-1 - Per Mile			$2.53						
P.26-3	Per Mile - Loop									
	A.16.16 High Capacity Unbundled Local Loop - STS-1 - Per Mile			$10.97						
P.50	4-WIRE DS1 LOOP WITH CHANNELIZATION WITH PORT									
P.50.VG-1	First Voice Grade in DS1									
	A.9.1 4-Wire DS1 Digital Loop			$39.61						
	B.1.1 Exchange Ports - 2-Wire Analog Line Port (Res., Bus., Centrex, Coin)			$1.09						
	Q.1.1 D4 Channel Bank Inside CO - System			$43.04						
	Q.1.4 Unbundled Loop Concentration - POTS Card			$.4689						
			1	$84.21						
				$44.72						
				$1.09						
				$43.04						
				$.4689						
			2	$89.32						
				$59.04						
				$1.09						
				$43.04						
				$.4689						
			3	$103.85						

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional indicated by * after cost element description
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Unbundled Network Elements Cost Summary

Study Name:				INSTALLATION				DISCONNECT		
State:		Zone	Recurring	Non Recurring					Non Recurring	
				First	First	Additional	Non Recurring	First	First	Additional

| A.1.813.14 P.1.812.30 | | | | | | | | | | |

P.50.VG-2
P.50.1 4-Wire DS1 Loop/Channelization Port Combination - Nonrecurring Costs - Switch-as-is										
Additional Voice Grade in same DS1			$1.09	$153.24	$8.37					
0.14 Unbundled Loop Concatenation - POTS Card			$1,489							
			$1.95							

P.50.DID-1
First 2-Wire DID in DS1										
A.8.1 4-Wire DS1 Digital Loop			$39.61							
B.13 Exchange Ports - 2-Wire DID Port			$3.50							
0.11 D4 Channel Bank Insta CO - Sysm			$43.04							
0.14 Unbundled Loop Concatenation - POTS Card		1	$1,489							
			$88.02							

P.50.DID-2
Additional 2-Wire DID in same DS1										
			$3.50							
		2	$1,489							
			$5.97							

| P.50.1 4-Wire DS1 Loop/Channelization Port Combination - Nonrecurring Costs - Switch-as-is | | 3 | $106.00 | $153.24 | $8.37 | | | | | |

P.50.ISDN-1
First ISDN in DS1										
A.9.1 4-Wire DS1 Digital Loop			$39.61							
B.15 Exchange Ports - 2-Wire ISDN Port			$9.00							
0.11 D4 Channel Bank Insta CO - Sysm			$43.04							
0.13 Unbundled Loop Concatenation - ISDN (Res Card)		1	$1.95							
			$80.40							

			$44.72							
			$9.00							
		2	$43.04							
			$1.95							
			$99.31							

| P.50.1 4-Wire DS1 Loop/Channelization Port Combination - Nonrecurring Costs - Switch-as-is | | 3 | $100.63 | $153.24 | $8.37 | | | | | |

P.50.ISDN-2
Additional ISDN in same DS1										
B.15 Exchange Ports - 2-Wire ISDN Port			$9.00							
0.13 Unbundled Loop Concatenation - ISDN (Res Card)			$1.95							
			$7.75							

P.50	4-Wire DS1 Loop/Channelization Port Combination - Subsequent Activity - Add Lines - Per Line		$49.87							
P.50.5	2-Wire DS1 Loop/Channelization Port Combination - Subsequent Activity - Add Trunks - Per Trunk		$71.34							
P.50.6	4-Wire DS1 Loop/Channelization Port Combination - Nonrecurring Costs - New - Per DS1			$379.04	$329.87			$99.43	$2.17	
P.50.7	4-Wire DS1 Loop/Channelization Port Voice Grade Combination - Nonrecurring Costs - New - Per Res, Bus, Centrex Voice Grade Port			$4.28	$4.21			$2.16		
P.50.8	4-Wire DS1 Loop/Channelization Port Voice Grade Combination - Nonrecurring Costs - New - Per PBX/ISDN Voice grade Port			$12.90	$8.00			$1.96		

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional indicated by * after cost element description
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Unbundled Network Elements Cost Summary

Study Name / State: A.1.1 813.14 P.1.1 813.36

Element	Zone	Recurring	Non Recurring	INSTALLATION Nonrecurring First	Additional	Non Recurring	DISCONNECT Nonrecurring First	Additional	Non Recurring
P.50.9 — 4-Wire DS1 Loop/Channelization Port Voice Grade Combination - Nonrecurring Code - New, Per 2-Wire DID Trunk Port							$20.77	$3.34	
P.51 EXTENDED 2-WIRE ISDN LOOP WITH DS1 INTEROFFICE TRANSPORT									
P.51-1 First 2-Wire ISDN In DS1				$36.00	$9.18				
A.5.1 2-Wire ISDN Digital Grade Loop		$19.24							
D.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination		$34.19							
A.18.1 Channelization - Channel System DS1 to DS0		$69.75							
A.18.3 Interface Unit - Interface DS1 to DS0 - BRITE Card		$1.86							
	1	$124.04							
		$25.23							
		$34.18							
		$69.75							
		$1.66							
	2	$130.83							
		$40.14							
		$34.18							
		$69.75							
		$1.66							
	3	$145.74							
P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is				$98.70	$95.70		$98.61		
P.17.9 Nonrecurring Cost - New DS1 Interoffice Facility w/ I/O MUX'ng for Combination Use Only				$173.86	$45.75		$43.60	$27.87	
P.17.10 Nonrecurring Cost - New VG Local Loop for Combination Use Only				$195.94	$38.38		$18.42	$6.66	
P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only				$27.33	$2.90		$16.98	$1.04	
				$397.12	$95.01		$79.06	$35.87	
P.51-2 Per Mile									
D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		$.1154							
P.51-3 Additional 2-wire ISDN In same DS1									
A.5.1 2-Wire ISDN Digital Grade Loop		$19.24							
A.18.3 Interface Unit - Interface DS1 to DS0 - BRITE Card		$1.66							
	1	$20.90							
		$25.23							
		$1.66							
	2	$26.89							
		$40.14							
		$1.66							
	3	$41.80							
P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only				$27.33	$2.90		$16.98	$1.04	
P.52 EXTENDED 4-WIRE DS1 DIGITAL LOOP WITH DEDICATED STS-1 INTEROFFICE TRANSPORT									
P.52-1 First In DS1 In STS1									
A.9.1 4-Wire DS1 Digital Loop		$39.61							
D.10.2 Interoffice Transport - Dedicated - STS-1 - Facility Termination		$358.07							
A.18.5 Channelization - Channel System DS3 to DS1		$121.90							
A.18.6 Interface Unit - Interface DS3 to DS1		$7.35							
	1	$527.53							
		$44.72							
		$358.07							
		$121.90							
		$7.35							
		$532.04							
		$59.04							
		$358.07							
	2	$121.90							

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional indicated by * after cost element description
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Unbundled Network Elements Cost Summary

			Zone	Recurring	INSTALLATION			DISCONNECT		
					Non Recurring	Nonrecurring First	Nonrecurring Additional	Non Recurring	Nonrecurring First	Nonrecurring Additional
Study Name:										
State:		A.1.1 $13.14 P.1.1 $12.90								
				$7.35						
			3	$546.96						
		P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is				$5.70	$5.70		$6.61	$6.61
		P.17.8 Nonrecurring Cost - New DS3 or STS-1 w/ 3/1 MUXing Interoffice Facility for Combination Use Only				$325.91	$77.07		$49.56	$32.80
		P.17.11 Nonrecurring Cost - New DS1 Local Loop for Combination Use Only				$209.45	$70.44		$37.91	$6.88
		P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only				$27.33	$2.90		$16.86	$1.04
						$562.69	$150.40		$104.32	$40.77
	P.52-2	Per Mile								
		D.10.1 Interoffice Transport - Dedicated - STS-1 - Per Mile		$2.53						
	P.52-3	Additional DS1 in same STS1								
		A.9.1 4-Wire DS1 Digital Loop		$39.61						
		A.16.6 Interface Unit - Interface DS3 to DS1		$7.35						
			1	$46.96						
				$44.72						
				$7.35						
			2	$52.07						
				$50.04						
				$7.35						
			3	$66.39						
		P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only				$27.33	$2.90		$16.86	$1.04
P.53		EXTENDED 2-WIRE VOICE GRADE LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX								
	P.53-1	First 2-Wire VG in First DS1 in DS3								
		A.1.2 2-Wire Analog Voice Grade Loop - Service Level 2		$11.26						
		D.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination		$34.19						
		A.16.5 Channelization - Channel System DS3 to DS1		$121.90						
		A.16.6 Interface Unit - Interface DS3 to DS1		$7.35						
		A.16.1 Channelization - Channel System DS1 to DS0		$69.75						
		A.16.4 Interface Unit - Interface DS1 to DS0 - Voice Grade Card		$.4669						
			1	$244.92						
				$16.43						
				$34.19						
				$121.90						
				$7.35						
				$69.75						
				$.4669						
			2	$250.09						
				$31.49						
				$34.19						
				$121.90						
				$7.35						
				$69.75						
				$.4669						
			3	$265.16						
		P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is				$5.70	$5.70		$6.61	$6.61
		P.17.5 Nonrecurring Cost - New DS1 Interoffice Facility w/ 1/0 MUXing for Combination Use Only				$173.86	$46.73		$43.80	$27.97
		P.17.10 Nonrecurring Cost - New VG Local Loop for Combination Use Only				$195.94	$36.38		$18.42	$6.86
		P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only				$27.33	$2.90		$16.86	$1.04
						$397.12	$85.01		$79.08	$35.87
	P.53-2	Per Mile per DS1								
		D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		$.1154						

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional indicated by * after cost element description
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		Unbundled Network Elements Cost Summary				INSTALLATION			DISCONNECT		
Study Name:						Non Recurring	Nonrecurring		Non Recurring	Nonrecurring	
State:		A.1.1 $13.14 P.1.1 $12.30					First	Additional		First	Additional
				Zone	Recurring						
	P.53-3	Additional 2-Wire VG in same DS1									
		A.1.2 2-Wire Analog Voice Grade Loop - Service Level 2			$11.26						
		A.16.4 Interface Unit - Interface DS1 to DS0 - Voice Grade Card			$.4689						
				1	$11.73						
					$16.43						
					$.4689						
				2	$16.90						
					$31.49						
					$.4689						
				3	$31.96						
		P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only					$27.33	$2.90		$16.86	$1.04
	P.53-4	Additional DS1 in same DS3									
		D.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination			$34.19						
		A.16.1 Channelization - Channel System DS1 to DS0			$69.75						
		A.16.6 Interface Unit - Interface DS3 to DS1			$7.35						
					$111.29						
		P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only					$27.33	$2.90		$16.86	$1.04
P.54		EXTENDED 4-WIRE VOICE GRADE LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX									
	P.54-1	First 4-Wire VG in First DS1 in DS3									
		A.4.1 4-Wire Analog Voice Grade Loop			$17.33						
		D.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination			$34.19						
		A.16.5 Channelization - Channel System DS3 to DS1			$121.90						
		A.16.6 Interface Unit - Interface DS3 to DS1			$7.35						
		A.16.1 Channelization - Channel System DS1 to DS0			$69.75						
		A.16.4 Interface Unit - Interface DS1 to DS0 - Voice Grade Card			$.4689						
				1	$250.99						
					$20.74						
					$34.19						
					$121.90						
					$7.35						
					$69.75						
					$.4689						
				2	$254.41						
					$28.81						
					$34.19						
					$121.90						
					$7.35						
					$69.75						
					$.4689						
				3	$262.47						
		P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is					$5.70	$5.70		$6.61	$6.61
		P.17.5 Nonrecurring Cost - New DS1 Interoffice Facility w/ 1/0 MUXing for Combination Use Only					$173.86	$45.73		$43.60	$27.97
		P.17.10 Nonrecurring Cost - New VG Local Loop for Combination Use Only					$195.94	$36.38		$18.42	$6.86
		P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only					$27.33	$2.90		$16.86	$1.04
							$397.12	$85.01		$79.06	$35.87
	P.54-2	Per Mile per DS1									
		D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile			$.1154						
	P.54-3	Additional 4-Wire VG in same DS1									
		A.4.1 4-Wire Analog Voice Grade Loop			$17.33						
		A.16.4 Interface Unit - Interface DS1 to DS0 - Voice Grade Card			$.4689						
				1	$17.79						

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional indicated by * after cost element description
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Unbundled Network Elements Cost Summary

Study Name:					INSTALLATION			DISCONNECT		
State:	A.1.1 $13.14 P.1.1 $12.98				Non Recurring	Nonrecurring First	Additional	Non Recurring	Nonrecurring First	Additional
		Zone	Recurring							
			$20.74							
			$.4689							
		2	$21.21							
			$28.61							
			$.4689							
		3	$29.28							
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only				$27.33	$2.90			$16.86	$1.04
P.54-4	Additional DS1 in same DS3									
	D.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination		$34.19							
	A.18.1 Channelization - Channel System DS1 to DS0		$69.75							
	A.18.6 Interface Unit - Interface DS3 to DS1		$7.35							
			$111.29							
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only				$27.33	$2.90			$16.86	$1.04
P.55	EXTENDED 4-WIRE 56 OR 64 KBPS DIGITAL LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX									
P.55-1	First 4-Wire in First DS1 in DS3									
	A.10.1 4-Wire 19, 56 or 64 Kbps Digital Grade Loop		$21.21							
	D.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination		$34.19							
	A.18.5 Channelization - Channel System DS3 to DS1		$121.90							
	A.18.6 Interface Unit - Interface DS3 to DS1		$7.35							
	A.18.1 Channelization - Channel System DS1 to DS0		$69.75							
	A.18.2 Interface Unit - Interface DS1 to DS0 - OCU-DP Card		$.9963							
		1	$255.40							
			$27.22							
			$34.19							
			$121.90							
			$7.35							
			$69.75							
			$.9963							
		2	$261.41							
			$36.38							
			$34.19							
			$121.90							
			$7.35							
			$69.75							
			$.9963							
		3	$270.57							
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is				$5.70	$5.70			$8.81	$8.81
	P.17.5 Nonrecurring Cost - New DS1 Interoffice Facility w/ 1/0 MUXing for Combination Use Only				$173.86	$45.73			$43.80	$27.97
	P.17.10 Nonrecurring Cost - New VG Local Loop for Combination Use Only				$195.94	$36.38			$18.42	$6.86
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only				$27.33	$2.90			$16.86	$1.04
					$397.12	$85.01			$79.06	$35.67
P.55-2	Per Mile per DS1									
	D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile		$.1154							
P.55-3	Additional 4-Wire in same DS1									
	A.10.1 4-Wire 19, 56 or 64 Kbps Digital Grade Loop		$21.21							
	A.18.2 Interface Unit - Interface DS1 to DS0 - OCU-DP Card		$.9963							
		1	$22.21							
			$27.22							
			$.9963							
		2	$28.22							
			$36.38							

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional indicated by * after cost element description
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				Zone	Recurring	INSTALLATION			DISCONNECT		
						Non Recurring	Nonrecurring First	Additional	Non Recurring	Nonrecurring First	Additional

Unbundled Network Elements Cost Summary

Study Name:
State: A.1.1 §13.14 P.1.1 §12.30

Item	Description		Zone	Recurring	Non Recurring	First	Additional	Non Recurring	First	Additional
				$.9963						
			3	$37.38						
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only					$27.33	$2.90		$16.86	$1.04
P.55-4	Additional DS1 in same DS3									
	D.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination			$34.19						
	A.18.1 Channelization - Channel System DS1 to DS0			$69.75						
	A.18.6 Interface Unit - Interface DS3 to DS1			$7.35						
				$111.29						
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only					$27.33	$2.90		$16.86	$1.04
P.56	EXTENDED LOOP 2-WIRE ISDN WITH DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX									
P.56-1	First 2-Wire in First DS1 in DS3									
	A.5.1 2-Wire ISDN Digital Grade Loop			$19.24						
	D.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination			$34.19						
	A.18.5 Channelization - Channel System DS3 to DS1			$121.90						
	A.18.6 Interface Unit - Interface DS3 to DS1			$7.35						
	A.18.1 Channelization - Channel System DS1 to DS0			$69.75						
	A.18.3 Interface Unit - Interface DS1 to DS0 - BRITE Card			$1.66						
			1	$254.10						
				$25.23						
				$34.19						
				$121.90						
				$7.35						
				$69.75						
				$1.66						
			2	$260.08						
				$40.14						
				$34.19						
				$121.90						
				$7.35						
				$69.75						
				$1.66						
			3	$275.00						
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is					$5.70	$5.70		$6.61	$6.61
	P.17.5 Nonrecurring Cost - New DS1 Interoffice Facility w/ 1/0 MUXing for Combination Use Only					$173.86	$45.73		$43.80	$27.97
	P.17.10 Nonrecurring Cost - New VG Local Loop for Combination Use Only					$195.94	$36.38		$18.42	$6.66
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only					$27.33	$2.90		$16.86	$1.04
						$397.12	$85.01		$79.08	$35.87
P.56-2	Per Mile per DS1									
	D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile			$.1154						
P.56-3	Additional 2-Wire in same DS1									
	A.5.1 2-Wire ISDN Digital Grade Loop			$19.24						
	A.18.3 Interface Unit - Interface DS1 to DS0 - BRITE Card			$1.66						
			1	$20.90						
				$25.23						
				$1.66						
			2	$26.89						
				$40.14						
				$1.66						
			3	$41.80						
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only					$27.33	$2.90		$16.86	$1.04

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional indicated by * after cost element description
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Unbundled Network Elements Cost Summary

Study Name:					INSTALLATION			DISCONNECT		
State:	A.1.1 $13.14 P.1.1 $12.38					Non	Nonrecurring		Non	Nonrecurring	
			Zone	Recurring	Recurring	First	Additional	Recurring	First	Additional
P.56-4	Additional DS1 in same DS3									
	D.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination			$34.19						
	A.16.1 Channelization - Channel System DS1 to DS0			$69.75						
	A.16.6 Interface Unit - Interface DS3 to DS1			$7.35						
				$111.29						
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only					$27.33	$2.90		$16.86	$1.04
P.57	EXTENDED 4-WIRE DS1 DIGITAL LOOP WITH DEDICATED DS1 INTEROFFICE TRANSPORT W/ 3/1 MUX									
P.57-1	First 4-Wire DS1 in DS3									
	A.9.1 4-Wire DS1 Digital Loop			$39.61						
	D.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination			$34.19						
	A.16.5 Channelization - Channel System DS3 to DS1			$121.90						
	A.16.6 Interface Unit - Interface DS3 to DS1			$7.35						
			1	$203.05						
				$44.72						
				$34.19						
				$121.90						
				$7.35						
			2	$208.16						
				$59.04						
				$34.19						
				$121.90						
				$7.35						
			3	$222.48						
	P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is					$5.70	$5.70		$8.61	$8.61
	P.17.5 Nonrecurring Cost - New DS1 Interoffice Facility w/ 1/0 MUXing for Combination Use Only					$173.86	$45.73		$43.80	$27.97
	P.17.10 Nonrecurring Cost - New VG Local Loop for Combination Use Only					$196.94	$36.38		$18.42	$6.86
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only					$27.33	$2.90		$16.86	$1.04
						$397.12	$85.01		$79.06	$35.87
P.57-2	Per Mile per DS1									
	D.4.1 Interoffice Transport - Dedicated - DS1 - Per Mile			$.1154						
P.57-3	Additional 4-Wire DS1 in same DS3									
	A.9.1 4-Wire DS1 Digital Loop			$39.61						
	A.16.6 Interface Unit - Interface DS3 to DS1			$7.35						
	D.4.2 Interoffice Transport - Dedicated - DS1 - Facility Termination			$34.19						
			1	$81.15						
				$44.72						
				$7.35						
				$34.19						
			2	$86.26						
				$59.04						
				$7.35						
				$34.19						
			3	$100.58						
	P.17.16 Nonrecurring Cost - New Feature Activation for Combination Use Only					$27.33	$2.90		$16.86	$1.04
P.58	EXTENDED 4-WIRE 56 OR 64 KBPS DIGITAL LOOP WITH DS0 INTEROFFICE TRANSPORT									
P.58-1	Fixed									
	A.10.1 4-Wire 19, 56 or 64 Kbps Digital Grade Loop			$21.21						
	D.3.2 Interoffice Transport - Dedicated - DS0 - Facility Termination			$7.83						
			1	$29.04						
				$27.22						
				$7.83						

Note: Nonrecurring cost on Initial and Subsequent basis rather than First and Additional indicated by * after cost element description

Unbundled Network Elements Cost Summary

Study Name:
State:

A.1.1 $13.44 P.1.1 $12.30

	Zone		RECURRING Recurring	INSTALLATION Non Recurring	INSTALLATION First	INSTALLATION Additional	DISCONNECT Non Recurring	DISCONNECT First	DISCONNECT Additional
	2		$35.05					
			$36.38					
			$7.83					
			$43.22					
	3							
P.17.1 Nonrecurring Cost for Extended Loop or Local Channel and Interoffice Combination Switch -As-Is					$5.70	$5.70	$8.61	$8.61
P.17.16 Nonrecurring Cost - New VG Local Loop for Combination Use Only					$195.94	$26.36	$18.42	$6.95
P.17.17 Nonrecurring Cost - New DS0 IOF for Combination Use Only					$66.53	$33.81	$43.42	$27.60
					$262.47	$60.98	$61.84	$34.46
Per Mile								
D.3.1 Interoffice Transport - Dedicated - DS0 - Per Mile		$.0057						

WIRECENTER BREAKDOWN DUE TO STIPULATED DEAVERAGING METHOD

| CURRENT | VS. | ADOPTED |

CLLI	Zone		CLLI	Zone
ACWOGAMA	1		ACWOGAMA	2
AGSTGAAU	2		AGSTGAAU	1
AGSTGAFL	2		AGSTGAFL	2
AGSTGAMT	2		AGSTGAMT	1
AGSTGATH	2		AGSTGATH	1
AIVLGAMA	1		AIVLGAMA	3
ALBYGAMA	3		ALBYGAMA	2
ALPRGAMA	1		ALPRGAMA	1
AMRCGAMA	3		AMRCGAMA	2
APNGGAES	2		APNGGAES	3
ARTNGAES	3		ARTNGAES	3
ASTLGAMA	1		ASTLGAMA	1
ATHNGAMA	3		ATHNGAMA	1
ATLNGAAD	1		ATLNGAAD	1
ATLNGABH	1		ATLNGABH	1
ATLNGABU	1		ATLNGABU	1
ATLNGACD	1		ATLNGACD	1
ATLNGACS	1		ATLNGACS	1
ATLNGAEL	1		ATLNGAEL	1
ATLNGAEP	1		ATLNGAEP	1
ATLNGAFP	1		ATLNGAFP	1
ATLNGAGR	1		ATLNGAGR	1
ATLNGAHR	1		ATLNGAHR	1
ATLNGAIC	1		ATLNGAIC	1
ATLNGALA	1		ATLNGALA	1
ATLNGAPP	1		ATLNGAPP	1
ATLNGASS	1		ATLNGASS	1
ATLNGATH	1		ATLNGATH	1
ATLNGAWD	1		ATLNGAWD	1
ATLNGAWE	1		ATLNGAWE	1
BCHNGAES	1		BCHNGAES	3
BCTNGAMA	3		BCTNGAMA	3
BGRTGAMA	1		BGRTGAMA	3
BLCSGAES	3		BLCSGAES	3
BNBRGAMA	3		BNBRGAMA	3
BRMNGAES	1		BRMNGAES	2
BRVIGAMA	1		BRVIGAMA	3
BRWKGAMA	3		BRWKGAMA	2
BUFRGABH	1		BUFRGABH	1
BWDNGAMA	1		BWDNGAMA	3
BXLYGAES	3		BXLYGAES	3
CCHRGAMA	3		CCHRGAMA	3
CDTWGAMA	1		CDTWGAMA	2
CHMBGAMA	1		CHMBGAMA	1
CLHNGAES	3		CLHNGAES	2
CLMBGABV	2		CLMBGABV	2

Code	Value	Code	Value
CLMBGAMT	2	CLMBGAMT	1
CLMBGAMW	2	CLMBGAMW	2
CLMTGAMA	1	CLMTGAMA	3
CLQTGAES	3	CLQTGAES	3
CMLLGAMA	3	CMLLGAMA	3
CMNGGAMA	1	CMNGGAMA	2
CNCRGAMA	1	CNCRGAMA	3
CNYRGAMA	1	CNYRGAMA	1
CORDGAMA	3	CORDGAMA	3
CRTNGAMA	1	CRTNGAMA	2
CRVLGAMA	1	CRVLGAMA	2
CSSTGAMA	2	CSSTGAMA	3
CVSPGAMA	3	CVSPGAMA	3
CVTNGAMT	1	CVTNGAMT	2
CXTNGAMA	3	CXTNGAMA	3
DBLNGAMA	3	DBLNGAMA	2
DGVLGAMA	1	DGVLGAMA	2
DLLSGAES	1	DLLSGAES	2
DLTHGAHS	1	DLTHGAHS	1
DNWDGAMA	1	DNWDGAMA	1
EBTNGAMA	3	EBTNGAMA	3
ESMNGAES	3	ESMNGAES	3
ETTNGAES	3	ETTNGAES	3
FKLNGAMA	3	FKLNGAMA	3
FLBRGAMA	1	FLBRGAMA	2
FRBNGAEB	1	FRBNGAEB	2
FRSYGAMA	3	FRSYGAMA	3
FTVYGAMA	3	FTVYGAMA	2
FYVLGASG	1	FYVLGASG	2
GAY-GAMA	1	GAY-GAMA	3
GBSNGAES	3	GBSNGAES	3
GNBOGAES	3	GNBOGAES	3
GNVLGAMA	3	GNVLGAMA	3
GRFNGAMA	1	GRFNGAMA	2
GSVLGAMA	1	GSVLGAMA	1
GTVLGAMA	1	GTVLGAMA	3
HGVLGAMA	3	HGVLGAMA	3
HMPNGAJW	1	HMPNGAJW	2
HMTNGAMA	2	HMTNGAMA	3
HPHZGAES	2	HPHZGAES	3
HRLMGAMA	2	HRLMGAMA	3
HZLHGAMA	3	HZLHGAMA	3
JCSNGAMA	1	JCSNGAMA	3
JESPGAES	3	JESPGAES	3
JHCRGAES	3	JHCRGAES	3
JKISGAMA	3	JKISGAMA	1
JNBOGAMA	1	JNBOGAMA	1
KGTNGAMA	1	KGTNGAMA	3
LERYGAMA	3	LERYGAMA	3
LGRNGAMA	3	LGRNGAMA	2
LGVLGACS	1	LGVLGACS	2
LKPKGAMA	3	LKPKGAMA	3

Sequence	Value	Sequence	Value
LLBNGAMA	1	LLBNGAMA	1
LMCYGAMA	3	LMCYGAMA	3
LMKNGAMA	3	LMKNGAMA	3
LRVLGAOS	1	LRVLGAOS	1
LSBGGAMA	3	LSBGGAMA	3
LSVLGAMA	3	LSVLGAMA	3
LTHNGAJS	1	LTHNGAJS	1
LTVLGACS	1	LTVLGACS	3
LULAGAMA	1	LULAGAMA	3
LYNSGAMA	3	LYNSGAMA	3
MACNGAGP	2	MACNGAGP	2
MACNGAMT	2	MACNGAMT	1
MACNGAVN	2	MACNGAVN	1
MCDNGAGS	1	MCDNGAGS	2
MDSNGAMA	3	MDSNGAMA	3
MLLNGAMA	3	MLLNGAMA	3
MNTIGAMA	3	MNTIGAMA	3
MRRWGAMA	1	MRRWGAMA	1
MRTTGAEA	1	MRTTGAEA	1
MRTTGAMA	1	MRTTGAMA	1
NRCRGAMA	1	NRCRGAMA	1
NWNNGAMA	1	NWNNGAMA	2
NWTNGAHD	3	NWTNGAHD	3
PANLGAMA	1	PANLGAMA	1
PLHMGAMA	3	PLHMGAMA	3
PLMTGAMA	1	PLMTGAMA	2
PNMTGAMA	2	PNMTGAMA	3
POLRGAMA	2	POLRGAMA	2
PTCYGAMA	1	PTCYGAMA	1
PWSPGAAS	1	PWSPGAAS	2
RCKMGAES	1	RCKMGAES	3
RCLDGAMA	3	RCLDGAMA	3
ROMEGATL	3	ROMEGATL	2
RPVLGAMA	1	RPVLGAMA	3
RSWLGAMA	1	RSWLGAMA	1
RTLGGAMA	3	RTLGGAMA	3
RVDLGAMA	1	RVDLGAMA	1
RYTNGAMA	3	RYTNGAMA	3
SCCRGAMA	1	SCCRGAMA	3
SENOGAMA	1	SENOGAMA	3
SMVLGAMA	3	SMVLGAMA	3
SMYRGAMA	1	SMYRGAMA	1
SMYRGAPF	1	SMYRGAPF	1
SNLVGAMA	1	SNLVGAMA	1
SNMTGALR	1	SNMTGALR	1
SNVLGAES	3	SNVLGAES	3
SPRKGAMA	3	SPRKGAMA	3
SPRTGAMA	3	SPRTGAMA	3
SRDSGAES	3	SRDSGAES	3
SSISGAES	3	SSISGAES	1
STBRGANH	1	STBRGANH	1
SVNHGABS	2	SVNHGABS	1

SVNHGADE	2
SVNHGAGC	2
SVNHGASI	2
SVNHGAWB	2
SVNHGAWI	2
SWBOGAES	3
SYLVGAES	3
TBISGAMA	2
TFTNGAMA	3
THSNGAMA	3
THVLGAMA	3
TLLPGAES	1
TMPLGAMA	1
TUKRGAMA	1
VDALGAMA	3
VLDSGAMA	3
VLRCGAES	1
WDBYGAES	3
WDLYGAMA	3
WDSTGACR	1
WGVLGAES	3
WRNSGAMA	3
WRRBGAMA	2
WRTNGAMA	3
WTVLGAES	3
WYBOGAES	3
WYCRGAMA	3
ZBLNGAMA	1

SVNHGADE	1
SVNHGAGC	1
SVNHGASI	2
SVNHGAWB	1
SVNHGAWI	1
SWBOGAES	3
SYLVGAES	3
TBISGAMA	1
TFTNGAMA	2
THSNGAMA	3
THVLGAMA	2
TLLPGAES	3
TMPLGAMA	3
TUKRGAMA	1
VDALGAMA	2
VLDSGAMA	2
VLRCGAES	2
WDBYGAES	3
WDLYGAMA	3
WDSTGACR	1
WGVLGAES	3
WRNSGAMA	3
WRRBGAMA	1
WRTNGAMA	3
WTVLGAES	3
WYBOGAES	3
WYCRGAMA	3
ZBLNGAMA	3